

## ASEPCO Product Datasheets



### Information about Products Designed for Critical Aseptic Processing Applications

Our customers use ASEPCO products in the most critical aseptic applications on earth.

**ASEPCO Weirless Radial-Diaphragm™ valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable.** ASEPCO valves provide added security in all high-purity processing. ASEPCO makes the original Radial-Diaphragm Valve, designed for tough applications and critical processes — providing the highest level of both safety and reliability. Our valves have won “Innovations in Pharmaceutical Processing” Awards in Bioprocessing and Parenteral Manufacturing.

**ASEPCO’s clamp assembly Weirless Radial-Diaphragm™ Inline Valves are a new technology innovation.** We’ve applied our contamination-free, radial diaphragm technology and easy-to-use clamp

assembly to an inline diaphragm valve configuration, creating a reliable valve that is easy to assemble and inspect.

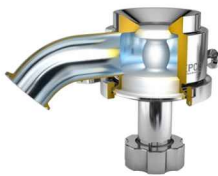
**With ASEPCO’s ASEPCONNECT™ and QUICKCONNECT™ Vessel Connectors, we’ve given you new options for installing a close-connect into a vessel.** These revolutionary designs are easier for fabricators to install, and give you improved sealing. We also have new inline versions of these great connectors, the ASEPCONNECT™ Inline Connector and the QUICKCONNECT™ Inline Connector.

**Our new ASEPTIPOINT family of products gives you space-saving solutions for connecting multiple probes to a vessel.**

ASEPCO innovates... developing products to save you time and money.

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### Weirless Radial-Diaphragm™ Inline Valves



- Inline Valve
- Sterile Access Valve
- Block and Bleed Valve

### Take-off Valves



- Zero Dead Leg Valve
- Point of Use Valve

### Close-Couple Aseptic Connectors



- ASEPTIPOINT Probe Mounts
- ASEPCONNECT™ Vessel
- QUICKCONNECT™ Vessel
- ASEPCONNECT™ Inline
- QUICKCONNECT™ Inline

### Process Valves



- Process Valve
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### Actuators



- Tank Valve Style
- Inline Valve Style

### Diaphragms



- Silicone, EPDM,
- Parylene treated,
- Viton, PTFE

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*When you need the ultimate safety and reliability in CIP/SIP equipment, ASEPCO is the logical choice.*

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part#AllProducts\_Datasheets\_160922

## The ASEPCO Weirless Radial-Diaphragm™ Tank-Bottom Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing. The Tank-Bottom Valve can be ported to allow it to be C/SIP or flushed while closed, providing access through the valve body to the downstream lines. The ability to quickly flush or C/SIP while the valve is closed solves downstream problems simply, and speeds the product changeover.

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### Features

- Radial-diaphragm
- Flush mount design
- Self-draining, highly cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Weep hole under diaphragm
- Patented shoulder seal
- Behind the seat flow path
- Multiple ports, locations, and configurations available

### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	0.5 inch, 1 inch, 1.5 inch, 2 inches, 2.5 inches, 3 inches, and 4 inches
Outlet Connections	Standard: Hygienic clamp, tube end, (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

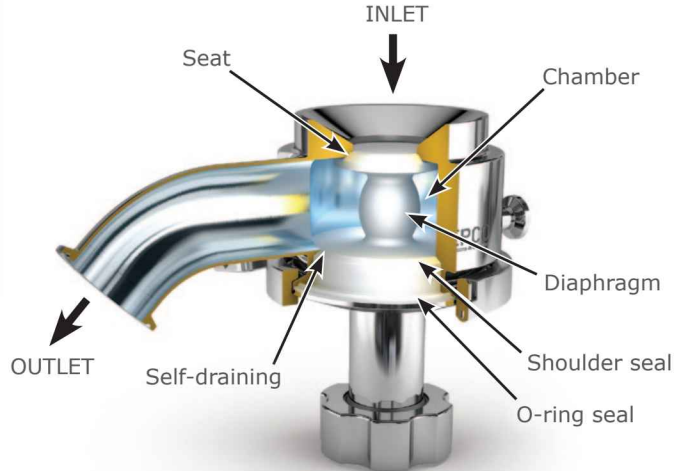
#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Sizes	0.5 inch, 1 inch, 1.5 inch, 2 inches, 3 inches, and 4 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

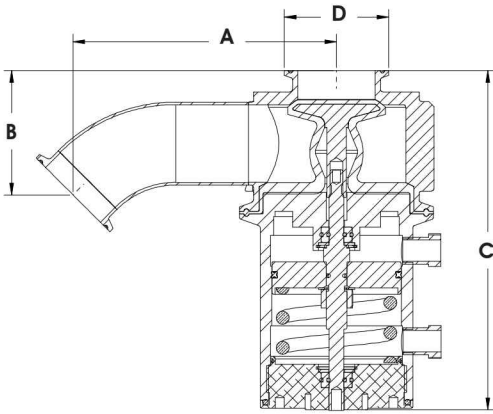
#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

\* Not available in all valve sizes

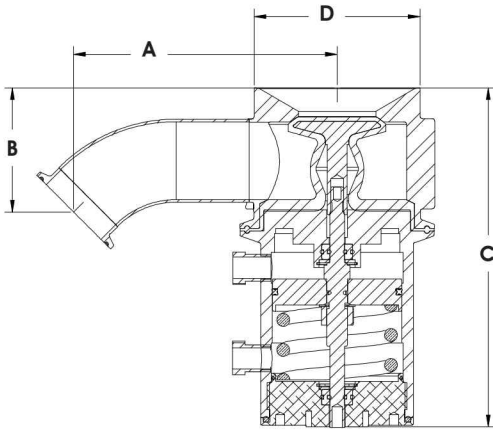


# Tank-Bottom Valve Dimensions, Flow Rates, and Weights Specifications



## TCXX-100-X: Clamp-Mounted Tank Valve

Size	A	B	C - with Pneumatic Actuator	C - with Manual Actuator	D
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	3.44 (87)	2.19 (56)	5.08 (129)	4.26 (108)	0.98 (25)
1.00	4.44 (113)	2.06 (52)	6.82 (173)	5.81 (148)	1.98 (50)
Compact 1.50	5.19 (132)	2.53 (64)	7.36 (187)	5.75 (146)	1.98 (50)
2.00	6.36 (162)	3.00 (76)	8.18 (208)	7.34 (186)	2.52 (64)
2.50	N/A	N/A	N/A	N/A	N/A
3.00	7.89 (200)	3.94 (100)	10.66 (271)	8.34 (212)	3.58 (91)
4.00	9.56 (243)	5.74 (146)	15.00 (381)	11.17 (284)	4.68 (119)



## TFXX-100-X: Flush-Mounted Tank Valve

Size	A	B	C - with Pneumatic Actuator	C - with Manual Actuator	D
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	3.44 (87)	2.19 (56)	5.08 (129)	4.26 (108)	1.98 (50)
1.00	4.44 (113)	2.06 (52)	6.82 (173)	5.81 (148)	2.98 (76)
Compact 1.50	5.19 (132)	2.53 (64)	7.36 (187)	5.75 (146)	2.98 (76)
2.00	6.36 (162)	3.00 (76)	8.18 (208)	7.34 (186)	4.00 (102)
2.50	7.54 (192)	3.97 (101)	10.66 (271)	8.34 (212)	4.91 (125)
3.00	7.89 (200)	3.94 (100)	10.66 (271)	8.34 (212)	4.91 (125)
4.00	9.56 (243)	5.74 (146)	15.00 (381)	11.17 (284)	7.00 (178)

## Tank Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.50	2.7 (10.2)
1.00	15.8 (59.8)
Compact 1.50	48 (180)
2.00	72 (272)
2.50	90 (340.7)
3.00	170 (643)
4.00	302 (1143)

## Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
0.50	0.64 (0.29)	2.69 (1.2)	2.39 (1.08)
1.00	3.60 (1.63)	7.80 (3.5)	8.65 (3.92)
Compact 1.50	3.92 (1.78)	7.07 (3.21)	9.72 (4.41)
2.00	16.38 (7.43)	22.93 (10)	24.73 (11.22)
2.50	38.59 (17.50)	45.59 (21)	62.34 (28.28)
3.00	38.59 (17.50)	45.58 (21)	62.33 (28.27)
4.00	68.58 (31.11)	84.08 (38)	120.98 (54.88)

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part#TankValve\_Datasheet\_160921

## The ASEPCO Weirless Radial-Diaphragm™ Insulate Valve

# ASEPCO

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PROCESSING EQUIPMENT

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

### Features

Extended body and diaphragm allows for direct welding of vessel jacket

Radial-diaphragm

Flush mount design

Self-draining, highly cleanable

Simple clamp assembly

Change diaphragms in seconds

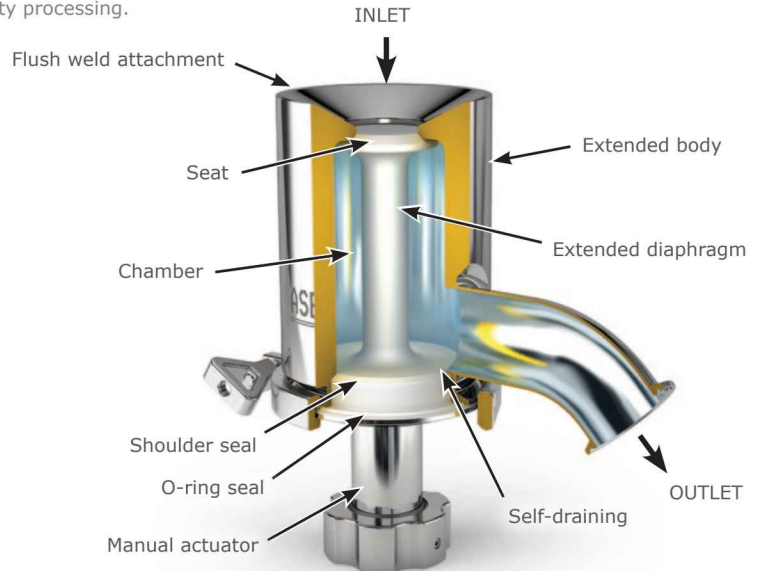
Integral travel stops

Weep hole under diaphragm

Patented shoulder seal

Behind the seat flow path

Multiple ports, locations, and configurations available



### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	1.5 inch, 2 inches
Outlet Connections	Standard: Hygienic clamp, tube end, (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

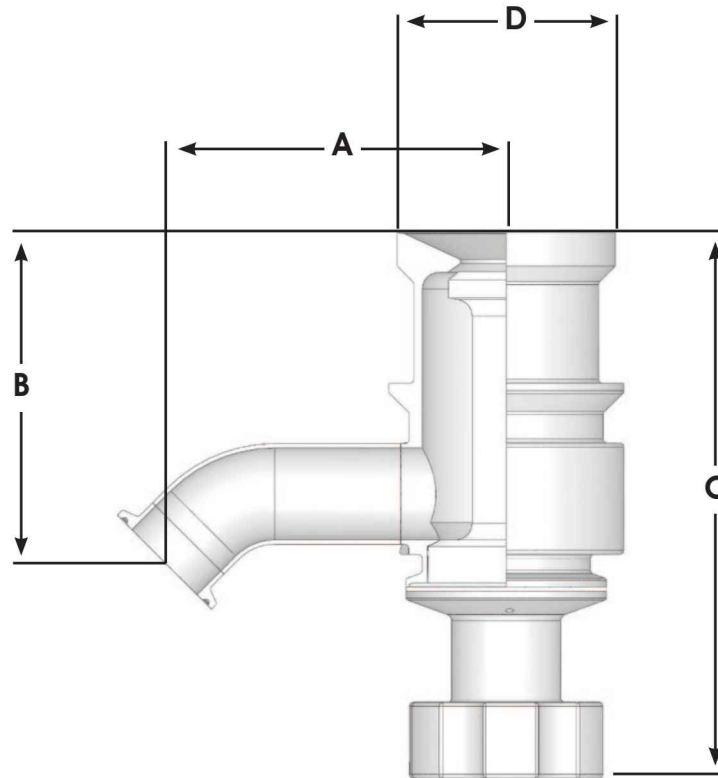
Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Sizes	1.5 inch, 2 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi
Parylene Treatment	-	√	-	√
Class	All materials: USP Class VI, 21 CFR 177.2600			

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepco.com

## Insulate Valve Dimensions, Flow Rates, and Weights Specifications



### TEXX-100-X: Insulate Valve

Size	A	B	C - with Manual Actuator	C - with Pneumatic Actuator	D
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
1.50	5.09 (129.3)	4.91 (124.7)	8.14 (206.8)	9.71 (246.6)	3.25 (82.6)
2.00	6.36 (161.5)	6.22 (158.0)	10.58 (268.7)	11.40 (289.6)	4.71 (119.6)

### Insulate Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
1.50	48 (180)
2.00	72 (272)

### Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
1.50	4.65 (2.1)	11.70 (5.3)	13.5 (6.1)
2.00	15.75 (7.2)	23.10 (10.5)	24.90 (11.3)

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part#InsulateValve\_datasheet\_160922

## The ASEPCO Weirless Radial-Diaphragm™ Tangential Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

ASEPCO developed the Tangential Radial-Diaphragm valve specifically for situations where a valve needs to be mounted off-center on the vessel head. This design is completely drainable in an off-set position and it retains all these standard benefits of an ASEPCO Radial-Diaphragm valve.

### Features

- Radial-diaphragm
- Flush mount design
- Self-draining, cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Flush or CIP/SIP while valve is closed

### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	0.5 inch, 1 inch, 1.5 inch, 2 inches, 2.5 inches, and 3 inches
Outlet Connections	Standard: Hygienic clamp, tube end, (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Sizes	1 inch through 3 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8" NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

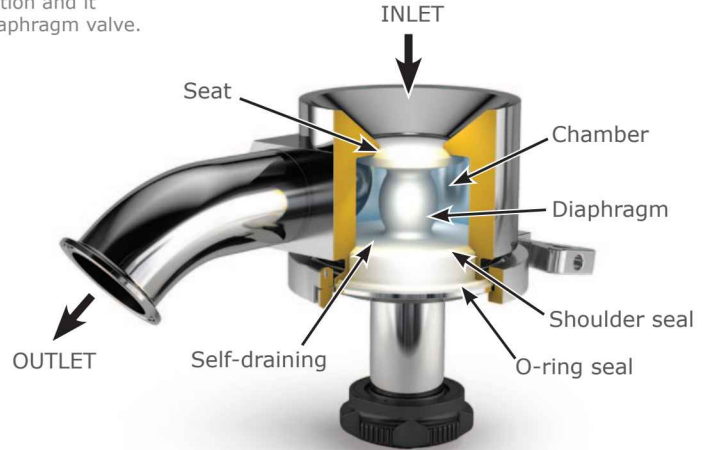
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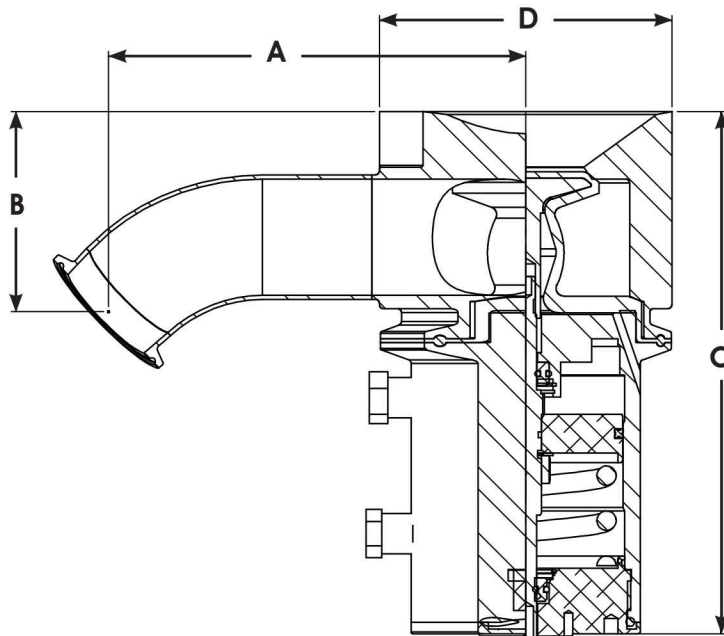
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\* Not available in all valve sizes

## Tangential Valve Dimensions, Flow Rates, and Weights Specifications



### TR/TLXX-100-X: Flush-Mounted Tangential Valve

Size inches	A in (mm)	B in (mm)	C - with Pneumatic Actuator in (mm)	C - with Manual Actuator in (mm)	D in (mm)
1.00	4.37 (111)	2.04 (52)	6.82 (173)	5.26 (134)	2.98 (76)
1.50	5.19 (132)	2.60 (66)	7.42 (189)	5.65 (144)	2.60 (66)
2.00	6.72 (171)	3.22 (82)	8.40 (213)	7.59 (193)	4.71 (120)
2.50	7.54 (192)	4.00 (102)	10.77 (274)	8.43 (214)	4.91 (125)
3.00	6.75 (171)	3.97 (101)	10.77 (274)	8.42 (214)	4.91 (125)

### Tangential Valve Flow Rates

Size inches	Cv at 1 psi (0.07 bar) GPM (LPM)
1.00	15.8 (59.8)
1.50	48 (180)
2.00	72 (272)
2.50	90 (340)
3.00	170 (643)

### Weights

Size inches	Valve Body lb (Kg)	Total Weight with Manual Actuator lb (Kg)	Total Weight with Pneumatic Actuator lb (Kg)
1.00	3.60 (1.63)	7.80 (3.5)	8.65 (3.92)
1.50	4.75 (2.15)	8.35 (3.78)	9.80 (4.44)
2.00	16.38 (7.43)	22.93 (10)	24.73 (11.22)
2.50	38.59 (17.50)	45.59 (21)	62.34 (28.28)
3.00	38.59 (17.50)	45.58 (21)	62.33 (28.27)

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# The ASEPCO Weirless Radial-Diaphragm™ Sterillite™ Valve



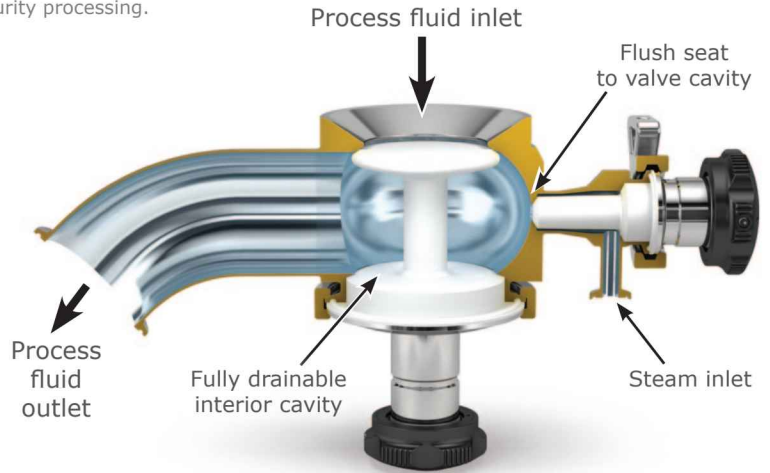
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## Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

### Features

- Radial-diaphragm
- Flush mount design
- Self-draining, highly cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Flush or CIP/SIP while valve is closed
- Satellite valve provides steam inlet
- Satellite valve diaphragm seals flush to ID of Main Valve Body



### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy, Polypropylene Machined from solid, hot-rolled, bar stock
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	0.75 inch, 1 inch, 1.5 inch, 2 inches, 2.5 inches, and 3 inches
Outlet Connections	Standard: Sanitary flange or buttweld, (others available)
Steam Valve Inlet Connection	0.5-inch Sanitary flange standard (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Autoclavable Manual or compact normally closed or normally open pneumatic Both actuators feature position and leak indicators and are self contained
Material	304 stainless steel housing, can be made in 316L
Sizes	0.5 inches through 4 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8" NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

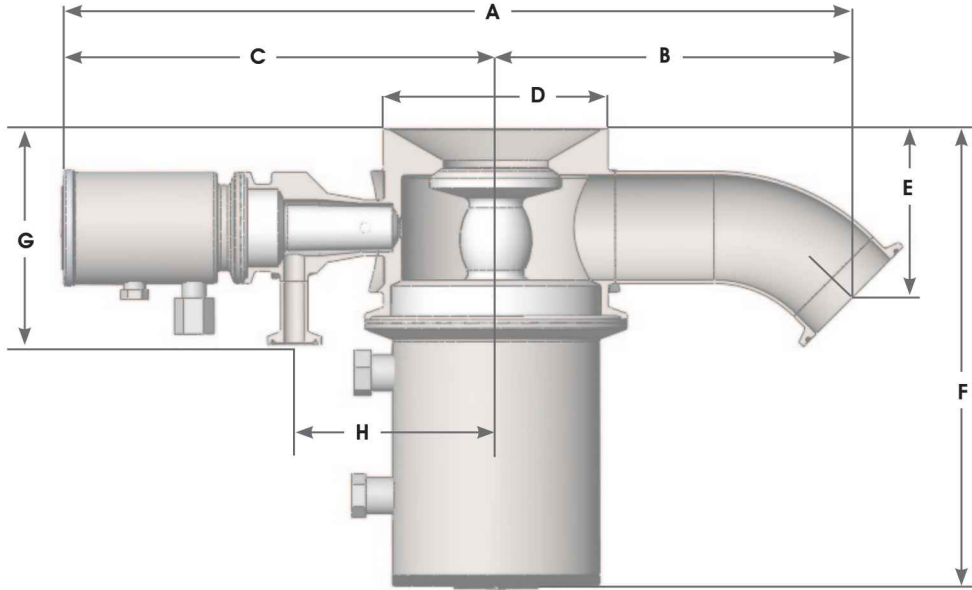
#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

\* Not available in all valve sizes

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## Sterillite Valve Dimensions, Flow Rates, and Weights Specifications



### TFXX-210-X: Flush-Mounted\* Sterillite Valve

Size	A	B	C - with Pneumatic Actuator	C - with Manual Actuator	D	E	F	G	H
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.75	4.44 (113)	2.06 (52)	6.82 (173)	5.81 (148)	2.98 (76)	2.98 (76)	2.98 (76)	3.34 (85)	2.89 (73)
1.00	9.98 (253)	3.78 (96)	8.19 (208)	7.34 (186)	2.98 (76)	2.45 (62)	5.25 (133)	3.34 (85)	2.89 (73)
1.50	11.71 (297)	5.19 (132)	7.26 (184)	6.53 (166)	2.98 (76)	2.53 (64)	5.75 (146)	3.59 (91)	3.17 (81)
2.00	13.33 (339)	6.43 (163)	10.66 (271)	8.34 (212)	4.00 (102)	3.75 (95)	7.30 (185)	3.84 (98)	3.59 (91)
2.50	7.89 (200)	7.54 (192)	10.66 (271)	8.34 (212)	4.91 (125)	4.91 (125)	4.91 (125)	4.34 (110)	4.38 (111)
3.00	16.92 (430)	9.24 (235)	15.00 (381)	11.17 (284)	4.91 (125)	5.22 (133)	8.34 (212)	4.34 (110)	4.38 (111)

\*Main Valve Body available in Clamp Inlet upon request

### Sterillite Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.75	10.5 (39.7)
1.00	15.8 (59.8)
1.50	47.5 (180)
2.00	72 (272)
2.50	170 (643)
3.00	302 (1143)

### Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (Kg)	lb (Kg)	lb (Kg)
0.75	3.10 (1.40)	6.75 (3.06)	7.95 (3.61)
1.00	3.00 (1.36)	6.65 (3.02)	7.85 (3.56)
1.50	4.43 (2)	8.08 (3.67)	9.28 (4.21)
2.00	7.60 (3.45)	13.75 (6.24)	15.40 (6.99)
2.50	13.29 (6.03)	19.39 (8.80)	36.04 (16.35)
3.00	13.18 (5.98)	19.28 (8.75)	35.93 (16.30)

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part#Sterillite\_Valve\_datasheet\_160921

## The ASEPCO Weirless Radial-Diaphragm™ Sample Valve

### Designed for Critical Aseptic Processing Applications

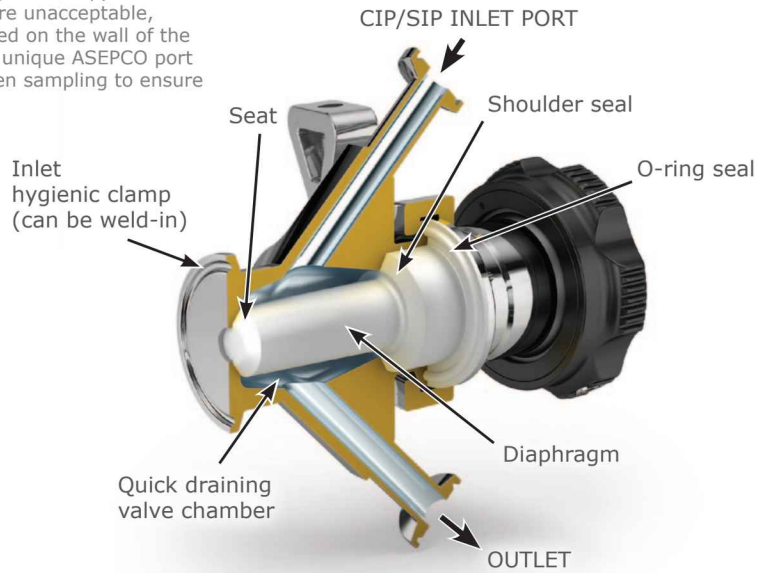
ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable, just like ASEPCO's original Tank-Bottom Valve. Mounted on the wall of the vessel just above the *knuckle*, it is equipped with the unique ASEPCO port that allows through-the-chamber CIP/SIP flow between sampling to ensure a truly representative sample every time.



ADVANCED ASEPTIC  
PROCESSING EQUIPMENT

### Features

- Through chamber CIP/SIP
- Radial-diaphragm
- Mounted on wall of vessel just above knuckle
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Patented shoulder seal
- Behind the seat flow path



### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Mounting Sizes	Weld-in or 1-inch to 3-inch clamp
Inlet Size	0.5 inch
CIP/SIP Port/Outlet Connections	Standard: 0.5-inch hygienic clamp, 0.5-inch tube end (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing, can be made in 316L
Size	0.5 inch
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

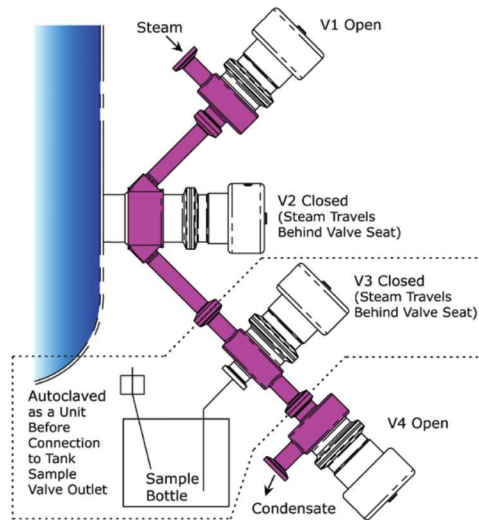
\* Not available in all valve sizes

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepc.com

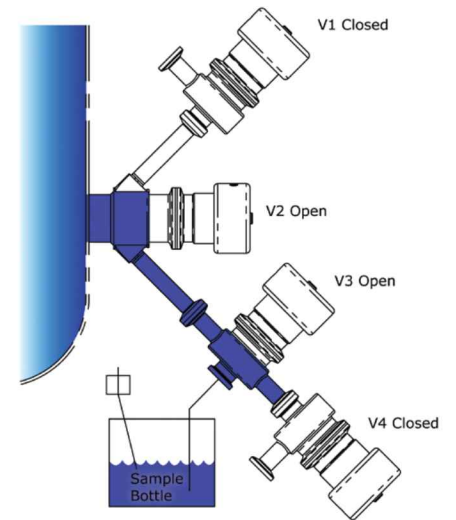
## ASEPCO Tank Sampling

With "behind the seat" cleaning our valve system allows contamination-free sampling as depicted in the graphics at right.

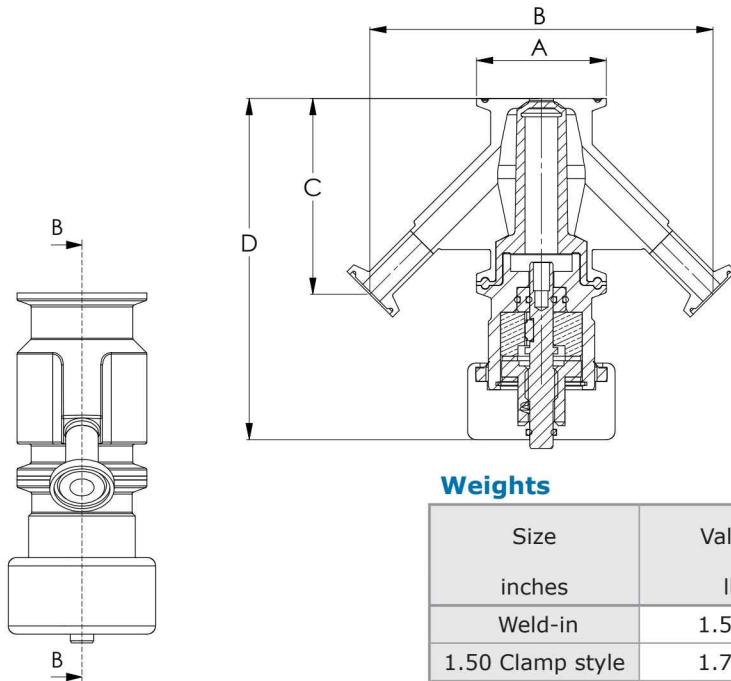
### Decontamination Flowpath (Pre or Post Sample)



### Sample Flowpath



## Sample Valve Dimensions, Flow Rates, and Weights Specifications



### Sample Valve Flow Rates

Inlet OD Size (A)	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
Weld-in	1.23 (4.66)
1.50 Clamp style	1.23 (4.66)
2.00 Clamp style	1.23 (4.66)
3.00 Clamp style	1.23 (4.66)

The only thing that changes is the size of the tri-clamp inlet.

### Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
Weld-in	1.50 (0.68)	4.30 (1.95)	4.00 (1.82)
1.50 Clamp style	1.75 (0.79)	4.25 (1.93)	4.55 (2.06)
2.00 Clamp style	2.00 (0.91)	4.50 (2.04)	4.80 (2.18)
3.00 Clamp style	2.25 (1.02)	4.75 (2.15)	5.00 (2.27)

### SC/SW Sample Valve Dimensions

Size	A	B	C	D - with Manual Actuator	D - with Pneumatic Actuator
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
Weld-in	1.55 (39.37)	5.25 (133.35)	2.99 (75.95)	5.21 (132.33)	6.04 (153.42)
1.50 Clamp style	1.98 (50.29)	5.25 (133.35)	2.99 (75.95)	5.21 (132.33)	6.04 (153.42)
2.00 Clamp style	2.52 (64.01)	5.25 (133.35)	2.99 (75.95)	5.21 (132.33)	6.04 (153.42)
3.00 Clamp style	3.58 (91.00)	5.25 (133.35)	2.99 (75.95)	5.21 (132.33)	6.04 (153.42)

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part# SampleValve\_Datasheet\_160921

## The ASEPCO Weirless Radial-Diaphragm™ I-Sample Valve

### Sampling for Critical Aseptic Processing Applications

All ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. The I-Sample Valve installs in a standard 25-mm Ingold port and is uniquely equipped with an ASEPCO port that allows through-the-chamber CIP/SIP flow between sampling to ensure a truly representative sample every time.

# ASEPCO

ADVANCED ASEPTIC  
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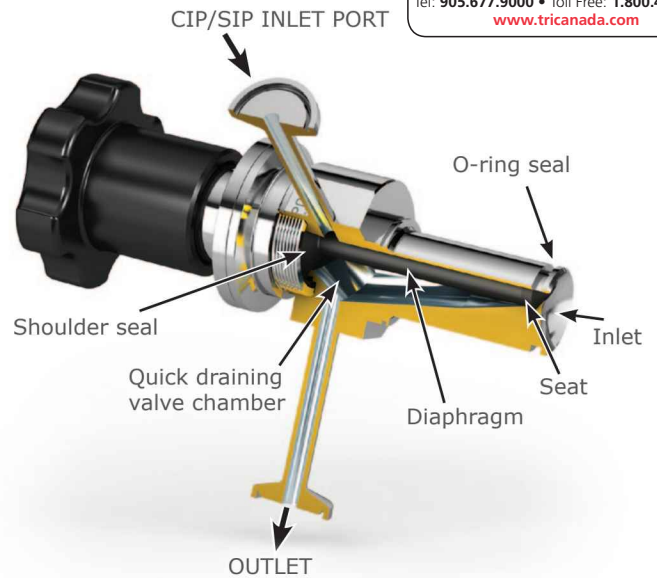
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### Features

- Through chamber CIP/SIP
- Radial-diaphragm
- Installs in any 25-mm Ingold port
- Change diaphragms in seconds
- Integral travel stops
- Patented shoulder seal
- Behind the seat flow path

Available in two models:  
threaded Ingold connection or  
clamp-on Ingold connection



### Specifications

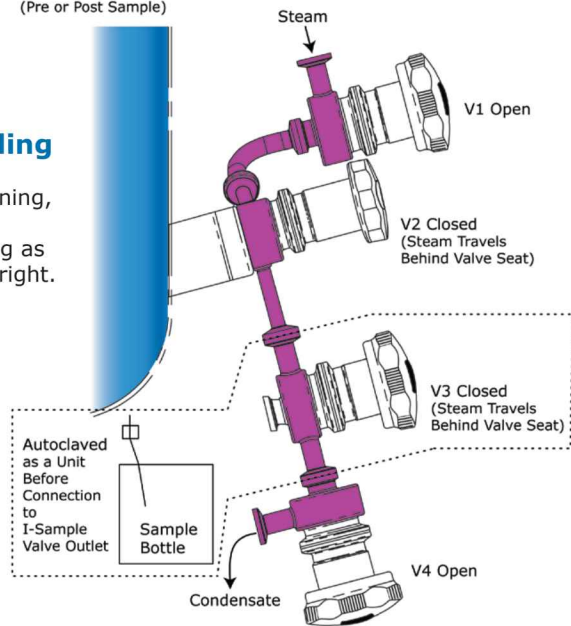
Valves	
Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Mounting	Installs in 25-mm Ingold port
Inlet Size	0.25 to 0.5 inch
CIP/SIP Port/Outlet Connections	0.25 to 0.5-inch hygienic clamp or tube end
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, ASME
Actuators	
Type	Manual
Material	304 stainless steel housing, can be made in 316L
Size	0.5 inch
Diaphragms	
Materials	Silicone                      Silicone Plus                      EPDM                      EPDM Plus
Temperature Range	-60 to 275°F                      -60 to 275°F                      -30 to 275°F                      -30 to 275°F
Pressure Range	100-150psi                      100-150psi                      100-150psi                      100-150psi
Parylene Treatment	-                      ✓                      -                      ✓
Class	All materials: USP Class VI, 21 CFR 177.2600

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or [info@asepc.com](mailto:info@asepc.com)

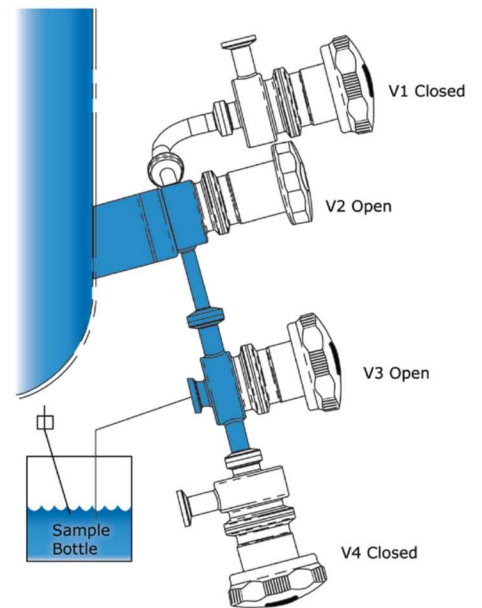
## ASEPCO Tank Sampling

With "behind the seat" cleaning, our valve system allows contamination-free sampling as depicted in the graphics at right.

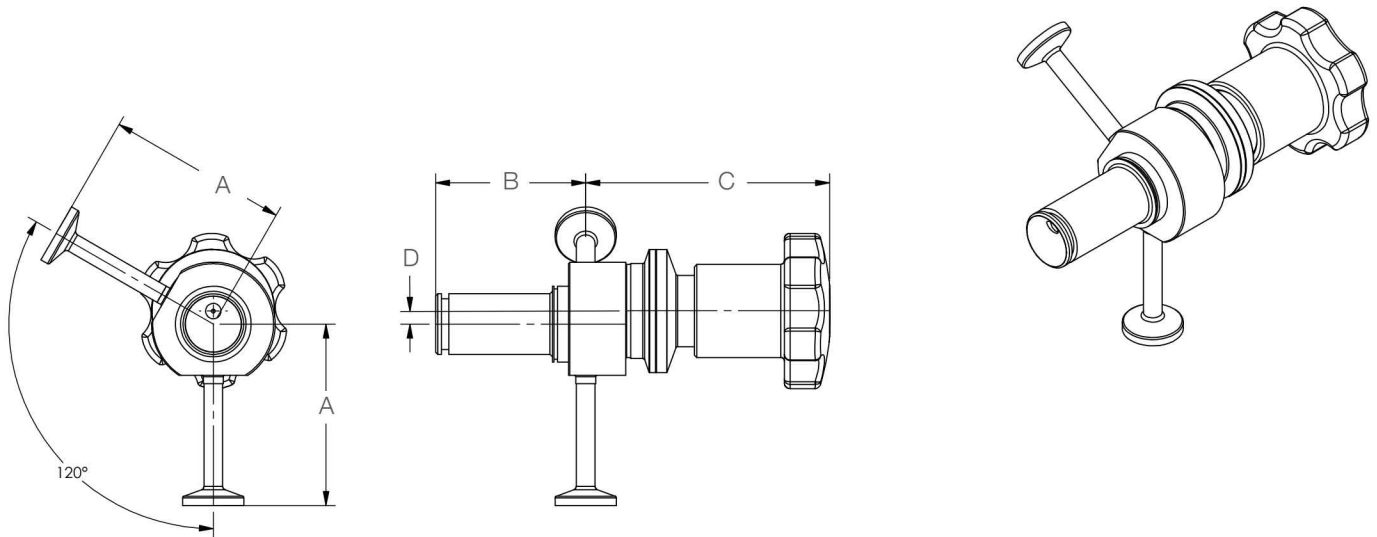
### Decontamination Flowpath (Pre or Post Sample)



### Sample Flowpath



## I-Sample Valve Dimensions, Flow Rates, and Weights Specifications



### I-Sample Valve Dimensions

Size	A	B	C	D	B + C (with Actuator)
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	2.92 (74.2)	2.42 (61.5)	3.93 (99.8)	0.21 (5.3)	6.35 (161.3)

### Weights

Size	Valve Body	Total Weight with Manual Actuator
inches	lb (kg)	lb (kg)
0.50	1.21 (0.55)	1.95 (0.88)

### I-Sample Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.25 Fitting connections	1.23 (4.66)
0.50 Fitting connections	2.6 (10.2)

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part# I-SampleValve\_Datasheet\_160922

## The ASEPCO Weirless Radial-Diaphragm™ Inline Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO weirless diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline valve configuration, creating a reliable valve that is easy to assemble and inspect.

#### Features

- Contamination-free, radial-diaphragm technology
- Clean, self-draining design
- Simple clamp assembly—no additional tools needed
- Integral travel stops
- Patented shoulder seal
- Isolates process fluids absolutely
- Drains fully in multiple orientations
- Easy to seal and inspect
- Up to 80% reduction in maintenance costs
- Reduced down-time when changing diaphragms
- Never needs re-tightening or adjustment
- Color code with any of 7 valve handle colors

#### Specifications

##### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock or forgings
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	0.5-inch compact, 0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Available Connections	Hygienic clamp, tube-end
Handle Colors	Standard: 1/2, 3/4, 1, and 1.5 inch black On request: blue, red, yellow, amber, green, purple
Maximum Pressure	150 psi
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

##### Actuators

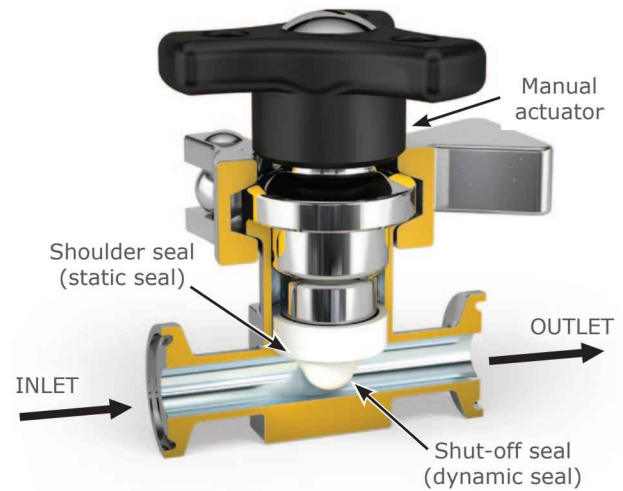
Types	Manual or pneumatic Fail open or closed
Material	Base is 304 stainless, manual handle is PES, pneumatic housing is PPS
Size	0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	PTFE bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

##### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi
Parylene Treatment	-	√	-	√
Class	All materials: USP Class VI, 21 CFR 177.2600			

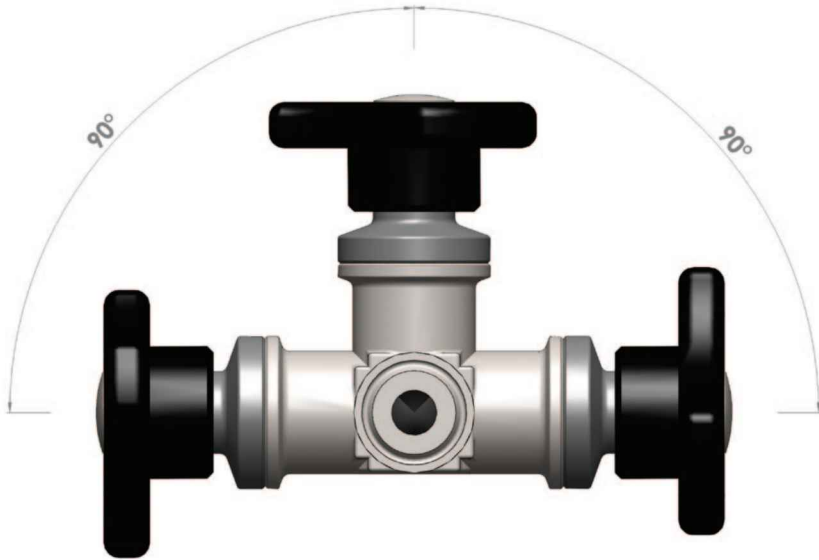


ADVANCED ASEPTIC  
PROCESSING EQUIPMENT

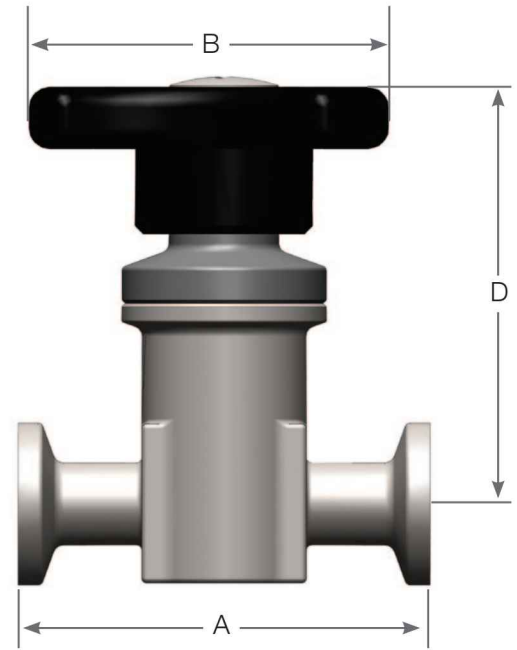


Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

## Inline Valve Dimensions, Flow Rates, and Weights Specifications



Fully drainable at multiple installation angles



### Inline Valve Flow Rates

Size inches	Cv at 1 psi (0.07 bar) GPM (LPM)
0.50 Compact	4.70 (17.8)
0.50	4.70 (17.8)
0.75	9.51 (36)
1.00	18.49 (70)
1.50	27.47 (104)

### Weights

Size inches	Valve Body lb (kg)	Total Weight with Manual Actuator lb (kg)	Total Weight with Pneumatic Actuator lb (kg)
0.50 Compact	0.29 (0.13)	0.94 (0.43)	1.49 (0.67)
0.50	0.38 (0.17)	1.55 (0.70)	2.10 (0.95)
0.75	0.51 (0.23)	1.77 (0.80)	3.30 (1.50)
1.00	1.39 (0.63)	3.86 (1.75)	6.66 (3.02)
1.50	2.90 (1.32)	7.07 (3.20)	11.47 (5.20)

Note: actuator weights include clamp and standard EPDM diaphragm

### Inline Valve Dimensions

Size inches	A in (mm)	B - with Manual Actuator in (mm)	B - with Pneumatic Actuator in (mm)	D - with Manual Actuator in (mm)	D - with Pneumatic Actuator in (mm)
0.50 Compact	2.50 (63.50)	2.40 (60.96)	2.08 (52.83)	2.53 (64.26)	5.27 (133.88)
0.50	3.50 (88.90)	2.40 (60.96)	2.08 (52.83)	2.53 (64.26)	5.27 (133.88)
0.75	3.00 (76.20)	2.40 (60.96)	3.10 (78.74)	2.90 (73.66)	6.70 (170.18)
1.00	4.50 (114.30)	2.60 (66.04)	3.10 (78.74)	4.10 (104.14)	7.50 (190.50)
1.50	5.50 (139.70)	2.60 (66.04)	6.20 (157.48)	4.10 (104.14)	12.90 (327.66)

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part#InlineValve\_Datasheet\_160922



## ASEPCO Weirless Radial-Diaphragm™ Sterile Access Valve



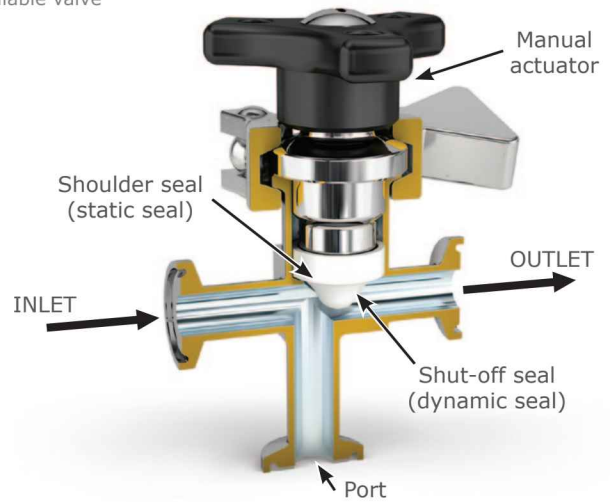
ADVANCED ASEPTIC  
PROCESSING EQUIPMENT

### Designed for Critical Aseptic Processing Applications

ASEPCO weirless diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline valve configuration, creating a reliable valve that is easy to assemble and inspect.

### Features

- Radial-diaphragm
- Clean, self-draining design
- Simple clamp assembly
- Integral travel stops
- Patented shoulder seal
- Isolates process fluids absolutely
- Drains fully in multiple orientations
- Easy to seal and inspect
- Up to 80% reduction in maintenance costs
- Reduced down-time when changing diaphragms
- Never needs re-tightening or adjustment
- Color code with any of 7 valve handle colors



### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock or forgings
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	0.5-inch Compact, 0.75 inch, 1 inch, and 1.5 inches
Available Connections	Hygienic clamp, tube-end
Handle Colors	Standard: 0.5, 0.75, 1.0, and 1.5 inch black On request: blue, red, yellow, amber, green, purple
Maximum Pressure	150 psi
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

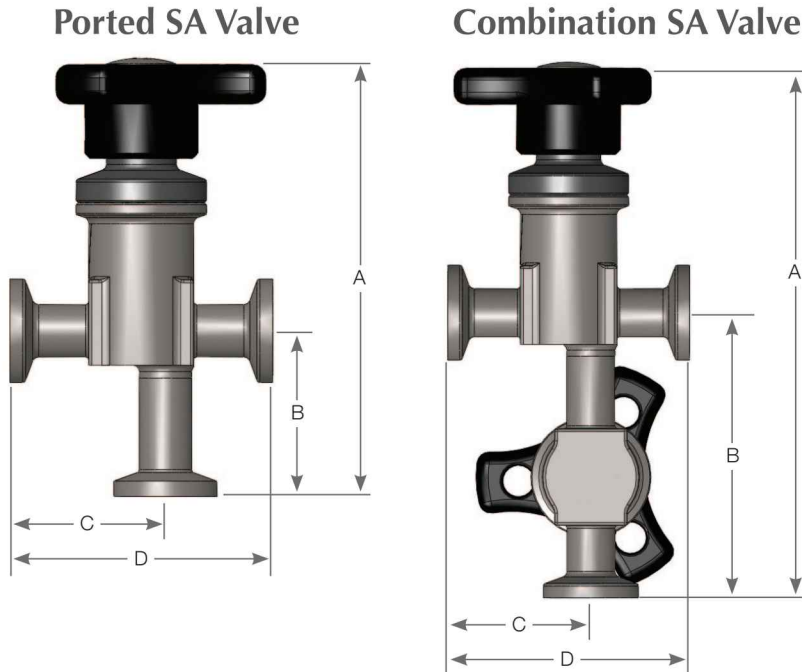
Types	Manual or pneumatic Fail open or closed
Material	Base is 304 stainless, manual handle is PES, pneumatic housing is PPS
Size	0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	PTFE bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi
Parylene Treatment	-	√	-	√
Class	All materials: USP Class VI, 21 CFR 177.2600			

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

## Sterile Access Valve Dimensions, Flow Rates, and Weights Specifications



### Sterile Access Valve Flow Rates

Size inches	Cv at 1 psi (0.07 bar) GPM (LPM)
0.50 Compact	4.70 (17.8)
0.75	9.51 (36)
1.00	18.49 (70)
1.50	27.47 (104)

### Ported SA Valve Dimensions

Size inches	A - with Manual Actuator in (mm)	A - with Pneumatic Actuator in (mm)	B in (mm)	C in (mm)	D in (mm)
0.50 Compact	4.10 (104.1)	6.32 (160.5)	1.58 (40.1)	1.48 (37.6)	2.50 (63.5)
0.75	4.38 (111.3)	8.63 (219.2)	1.86 (47.2)	1.93 (49.0)	3.00 (76.2)
1.00	6.03 (153.2)	11.11 (282.2)	1.98 (50.3)	2.97 (75.4)	4.50 (114.3)
1.50	6.33 (160.8)	15.15 (384.8)	2.24 (56.9)	3.88 (98.6)	5.50 (139.7)

### Combination SA Valve Dimensions

Size inches	A - with Manual Actuator in (mm)	A - with Pneumatic Actuator in (mm)	B in (mm)	C in (mm)	D in (mm)
0.50 Compact	5.48 (139.2)	7.70 (195.6)	2.95 (74.9)	1.48 (37.6)	2.50 (63.5)
0.75	6.20 (157.5)	10.45 (265.4)	3.73 (94.7)	1.93 (49.0)	3.00 (76.2)
1.00	9.41 (239.0)	14.49 (368.0)	5.36 (136.1)	2.97 (75.4)	4.50 (114.3)
1.50	10.71 (272.0)	19.52 (495.8)	6.62 (168.1)	3.88 (98.6)	5.50 (139.7)

### Ported SA Valve Weights

Size inches	Total Weight with Manual Actuator lb (kg)	Total Weight with Pneumatic Actuator lb (kg)
0.50 Compact	0.96 (0.44)	1.51 (0.69)
0.75	1.89 (0.86)	3.74 (1.70)
1.00	3.94 (1.79)	6.89 (3.13)
1.50	7.15 (3.25)	14.70 (6.68)

### Combination SA Valve Weights

Size inches	Total Weight with Manual Actuator lb (kg)	Total Weight with Pneumatic Actuator lb (kg)
0.50 Compact	1.84 (0.84)	2.94 (1.34)
0.75	3.56 (1.62)	7.26 (3.30)
1.00	7.43 (3.38)	13.33 (6.06)
1.50	14.24 (6.47)	29.30 (13.32)

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part#SterileAccessValve\_Datasheet\_160922

## ASEPCO Weirless Radial-Diaphragm™ Block and Bleed Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO weirless diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline valve configuration, creating a reliable valve that is easy to assemble and inspect.

### Features

- Block body design eliminates dead leg area
- Radial-diaphragm
- Clean, self-draining design
- Simple clamp assembly
- Integral travel stops
- Patented shoulder seal
- Isolates process fluids absolutely
- Easy to seal and inspect
- Up to 80% reduction in maintenance costs
- Reduced down-time when changing diaphragms
- Never needs re-tightening or adjustment

### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy Machined from solid, hot-rolled, bar stock or forgings
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	0.5-inch Compact, 0.75 inch, 1 inch, and 1.5 inches
Available Connections	Hygienic clamp, tube-end
Handle Colors	Standard: 1/2, 3/4, 1, and 1.5 inch black On request: blue, red, yellow, amber, green, purple
Maximum Pressure	150 psi
Maximum Temperature	135°C/275°F
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or pneumatic Fail open or closed
Material	Base is 304 stainless, manual handle is PES, pneumatic housing is PPS
Size	0.5 inch, 0.75 inch, 1 inch, and 1.5 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	PTFE bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi
Parylene Treatment	-	√	-	√
Class	All materials: USP Class VI, 21 CFR 177.2600			

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

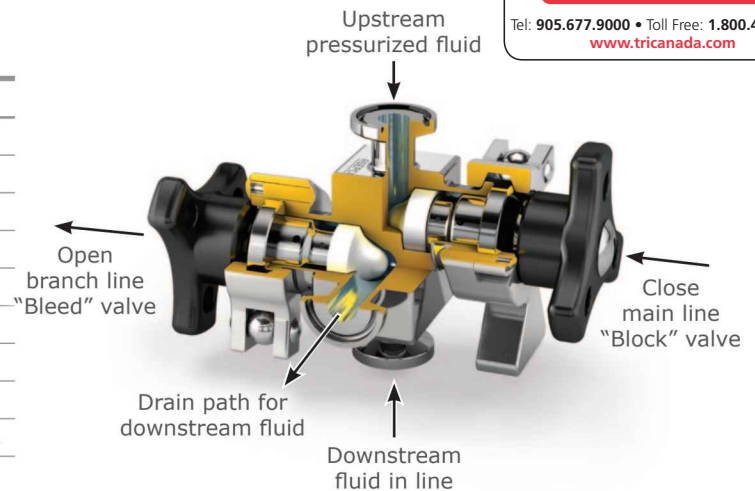
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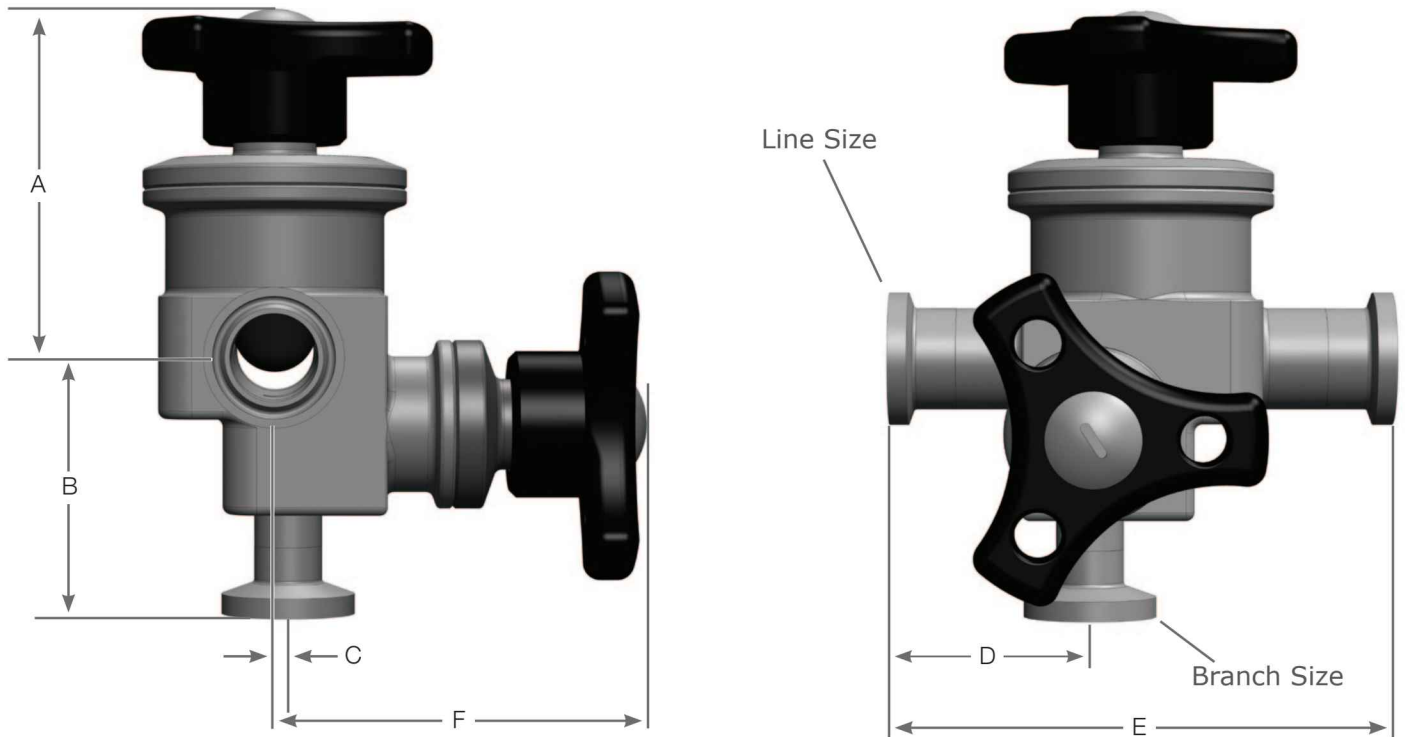
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## Block and Bleed Valve Dimensions, Flow Rates, and Weights Specifications



### Block and Bleed Valve Dimensions

Line x Branch Size	A	B	C	D	E	F
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
1/2" x 1/2"	4.35 (110.5)	1.70 (43.2)	0.00 (0.0)	1.24 (31.5)	2.75 (69.9)	2.65 (67.3)
3/4" x 1/2"	4.52 (114.8)	1.92 (48.8)	0.10 (2.5)	1.50 (38.1)	3.75 (95.2)	2.75 (69.9)
3/4" x 3/4"	5.25 (133.4)	2.65 (67.3)	0.00 (0.0)	1.63 (41.4)	3.70 (94.0)	2.58 (65.5)

### Block and Bleed Valve's Main Line Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
1/2" x 1/2"	4.70 (17.8)
3/4" x 1/2"	9.51 (36)
3/4" x 3/4"	9.51 (36)

### Block and Bleed Valve Weights

Size	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (Kg)	lb (Kg)
1/2" x 1/2"	1.50 (0.68)	2.60 (1.20)
3/4" x 1/2"	2.2 (1.00)	6.20 (2.80)
3/4" x 3/4"	5.60 (2.50)	9.30 (4.20)

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part#BlockBleedValve\_datasheet\_160922

## The ASEPCO Weirless Radial-Diaphragm™ Zero Dead Leg Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

The ASEPCO Zero Dead Leg Valve is used in situations where sampling, draining, transferring, or diverting process fluid from a line is necessary.

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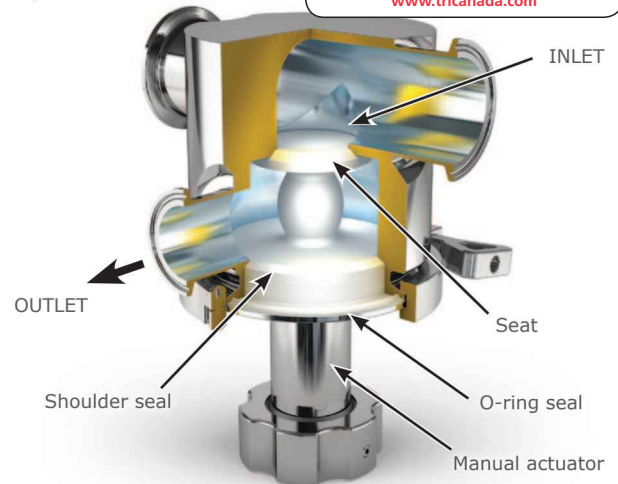
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### Features

- Radial-diaphragm
- Flush mount design
- Drains completely in three mounting positions including upside down
- Can be CIP/SIP to eliminate caking
- Fits into tight piping areas
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops



### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy, Alloy C-22 and C276 Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Line Sizes	0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches, 3 inches, 4 inches
Outlet Connections	End: Sanitary flange and butt weld; Optional Port: Per customer specification
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing; can be made in 316L
Sizes	0.5 inch through 4 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

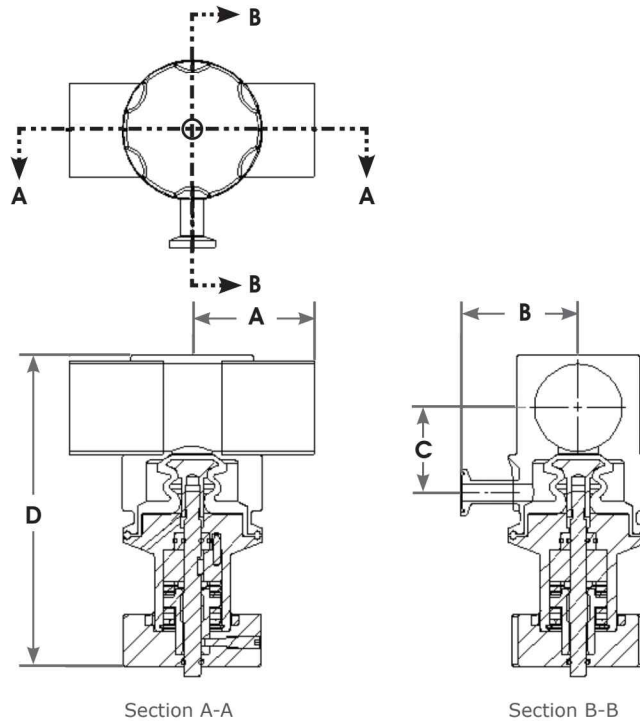
#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

\* Not available in all valve sizes

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepc.com

# Zero Dead Leg Valve Dimensions, Flow Rates, and Weights Specifications



## KWXX-100-X Zero Dead Leg Valve Dimensions

Line Size*	A	B	C	D - with Manual Actuator	D - with Pneumatic Actuator
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	1.86 (47.2)	2.07 (52.5)	0.53 (13.5)	4.21 (106.9)	5.03 (127.8)
0.75	1.99 (50.4)	1.96 (49.8)	0.78 (19.8)	4.71 (119.6)	5.53 (140.5)
1.00	4.40 (111.8)	2.53 (64.3)	1.06 (26.9)	5.76 (146.3)	7.38 (187.5)
1.50	3.35 (85.1)	2.53 (64.3)	2.06 (52.3)	6.18 (157.0)	8.12 (206.2)
2.00	4.23 (107.4)	3.25 (82.6)	2.065 (52.5)	6.74 (171.2)	8.37 (212.6)
3.00	4.23 (107.4)	2.53 (64.3)	2.065 (52.5)	7.683 (195.1)	9.31 (236.5)

\*Note: For Inlet sizes 1 inch and below the outlet is 1/2 inch.  
For Inlet sizes 1.5 inches and larger the outlet is 1 inch.  
For other configurations, call ASEPCO.

## Zero Dead Leg Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.50	2.7 (10.2)
1.00	15.8 (59.8)
1.50	48 (180)
2.00	72 (272)
3.00	170 (643)

## Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
0.50	1.00 (0.45)	3.05 (1.39)	2.75 (1.25)
0.75	1.40 (0.64)	3.45 (1.57)	3.15 (1.43)
1.00	1.50 (0.68)	5.70 (2.59)	6.55 (2.98)
1.50	2.20 (1.00)	8.75 (3.98)	10.55 (4.80)
2.00	3.50 (1.59)	10.05 (4.57)	11.85 (5.39)
3.00	6.00 (2.73)	13.00 (5.91)	29.75 (13.52)

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part#ZeroDeadLegValve\_datasheet\_160922

## The Weirless ASEPCO Radial-Diaphragm™ Point of Use Valve

# ASEPCO

ADVANCED ASEPTIC  
PROCESSING EQUIPMENT

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

The ASEPCO Point of Use Valve is used in situations where sampling, draining, transferring, or diverting process fluid from a line is necessary.

### Features

- Radial-diaphragm
- Valve seat flush with process line
- Integrated elbows for connection to piping loops
- Minimal L/D ratio enables easy cleaning
- Can be CIP/SIP to eliminate caking
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops

### Specifications

#### Valves

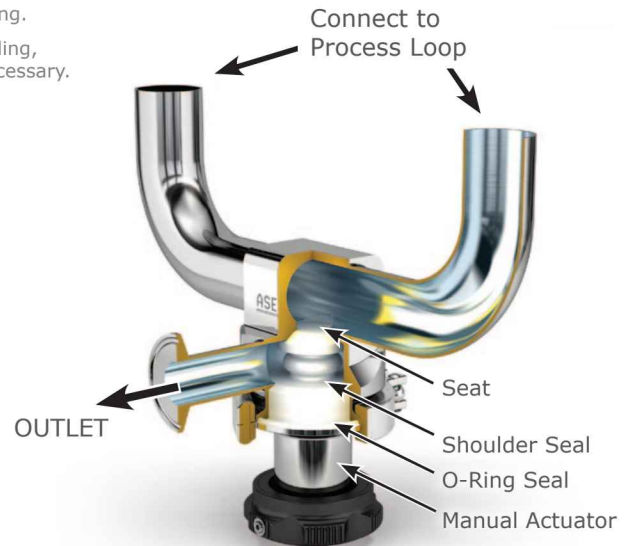
Material	316L, AL6XN, Hastelloy, Alloy C-22 and C276 Machined from solid, hot-rolled, bar stock
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Inlet Sizes	0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches, 2.5 inches, 3 inches, 4 inches
Outlet Sizes	0.5 inch, 0.75 inch, 1 inch, 1.5 inch, 2 inches
Inlet/Outlet Connections	Sanitary flange outlet and buttweld inlet are standard, other options available
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing; can be made in 316L
Sizes	0.5 inch through 2 inches
Operating Air Pressure	100psi max for Pneumatic Actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

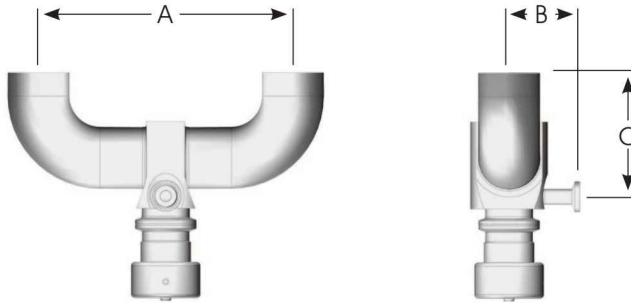
Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					



\* Not available in all valve sizes

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepc.com

## Point of Use Valve Dimensions, Flow Rates, and Weights Specifications



### Point of Use Valve Flow Rates

Outlet Size (inches)	Cv at 1 psi (0.07 bar) GPM (LPM)
0.50	2.7 (10.2)
0.75	10.6 (40)
1.00	15.8 (59.8)
1.50	48 (180)
2.00	72 (272)

### UPXX-100-X Point of Use Valve Dimensions Center to Center Dimension (A)

Line Size (BW)	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00
Outlet Size (Clamp)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	7.71 (195.8)	7.71 (195.8)	7.71 (195.8)	8.80 (223.5)	11.00 (279.4)	14.00 (355.6)	15.50 (393.7)	19.00 (482.6)
0.75		8.50 (215.9)	8.50 (215.9)	10.00 (254.0)	12.00 (304.8)	14.00 (355.6)	15.50 (393.7)	19.00 (482.6)
1.00			8.50 (215.9)	10.00 (254.0)	12.00 (304.8)	14.00 (355.6)	15.50 (393.7)	19.00 (482.6)
1.50				11.94 (303.3)	12.50 (317.5)	14.00 (355.6)	16.00 (406.4)	20.00 (508.0)
2.00					13.75 (349.3)	15.25 (387.4)	16.00 (406.4)	20.00 (508.0)

### Center to Face Dimension (B)

Line Size (BW)	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00
Outlet Size (Clamp)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	2.08 (52.8)	2.08 (52.8)	2.08 (52.8)	2.08 (52.8)	2.28 (57.9)	2.53 (64.3)	2.53 (64.3)	2.53 (64.3)
0.75		2.53 (64.3)	2.53 (64.3)	2.53 (64.3)	2.53 (64.3)	2.78 (70.6)	2.78 (70.6)	2.53 (64.3)
1.00			2.53 (64.3)	2.53 (64.3)	2.53 (64.3)	2.78 (70.6)	2.78 (70.6)	2.53 (64.3)
1.50				3.35 (85.1)	3.35 (85.1)	3.35 (85.1)	3.35 (85.1)	3.25 (82.6)
2.00					3.25 (82.6)	3.25 (82.6)	3.25 (82.6)	3.25 (82.6)

### Center to Face Dimension (C)

Line Size (BW)	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00
Outlet Size (Clamp)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	3.53 (89.7)	3.78 (96.0)	3.78 (96.0)	4.77 (121.2)	5.99 (152.1)	7.58 (192.5)	8.58 (217.9)	10.77 (273.6)
0.75		4.06 (103.1)	4.06 (103.1)	5.19 (131.8)	6.44 (163.6)	7.50 (190.5)	8.69 (220.7)	10.64 (270.3)
1.00			4.06 (103.1)	5.07 (128.8)	6.32 (160.5)	7.37 (187.2)	8.57 (217.7)	10.52 (267.2)
1.50				5.81 (147.6)	7.06 (179.3)	8.07 (205.0)	9.06 (230.1)	11.30 (287.0)
2.00					6.81 (173.0)	7.82 (198.6)	8.81 (223.8)	11.05 (280.7)

All Process Line and Outlet sizes are in inches

### Weights

Line Size (BW)	0.50	0.75	1.00	1.50	2.00	2.50	3.00	4.00
Outlet Size (Clamp)	lb (Kg)	lb (Kg)	lb (Kg)	lb (Kg)	lb (Kg)	lb (Kg)	lb (Kg)	lb (Kg)
0.50	3.33 (1.5)	3.89 (1.8)	4.63 (2.1)	4.53 (2.0)	6.59 (3.0)	8.99 (4.1)	13.75 (6.3)	18.93 (8.6)
0.75		6.09 (2.8)	4.63 (2.1)	6.13 (2.8)	8.29 (3.8)	8.99 (4.1)	13.75 (6.3)	18.93 (8.6)
1.00			8.58 (3.9)	8.28 (3.8)	10.44 (4.7)	11.14 (5.1)	16.00 (7.3)	21.08 (9.6)
1.50				19.43 (8.8)	21.29 (9.7)	22.09 (10.0)	22.95 (10.4)	37.43 (17.0)
2.00					20.99 (9.5)	21.79 (9.9)	22.85 (10.4)	37.43 (17.0)

All weights are with manual actuator.

All process line and outlet sizes are in inches.

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part#PointOfUseValve\_datasheet\_160921



## The ASEPCO Weirless Radial-Diaphragm™ Process Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, or cross-contamination are unacceptable. ASEPCO valves provide added security in all high-purity processing.

The ASEPCO 90° Process Valve is used in process lines at the point where the flow path changes 90°. These flow changes are commonly found in the WFI system loops and the food, dairy, and beverage industries.

### Features

- Radial-diaphragm
- Flush mount design
- Drains completely in three mounting positions including upside down
- Can be CIP/SIP to eliminate caking
- Fits into tight piping areas
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops

### Specifications

#### Valves

Material	316L, AL6XN, Hastelloy, Alloy C-22 and C276, Polypropylene Machined from solid, hot-rolled, bar stock
Surface Finish	Max. 20 micro-inch Ra (0.5 µm Ra), electropolished Max. 15 micro-inch Ra (0.375 µm Ra), electropolished Max. 10 micro-inch Ra (0.25 µm Ra), electropolished
Sizes	0.5 inch, 1 inch, 1.5 inch, 2 inches, 3 inches, 4 inches
Outlet Connections	End: Sanitary flange and butt weld; Optional Port: Per customer specification
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

#### Actuators

Types	Manual or compact pneumatic Fail open or closed
Material	304 stainless steel housing; can be made in 316L
Sizes	0.5 inch through 4 inches
Operating Air Pressure	100 psi max. for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8-inch NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

#### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

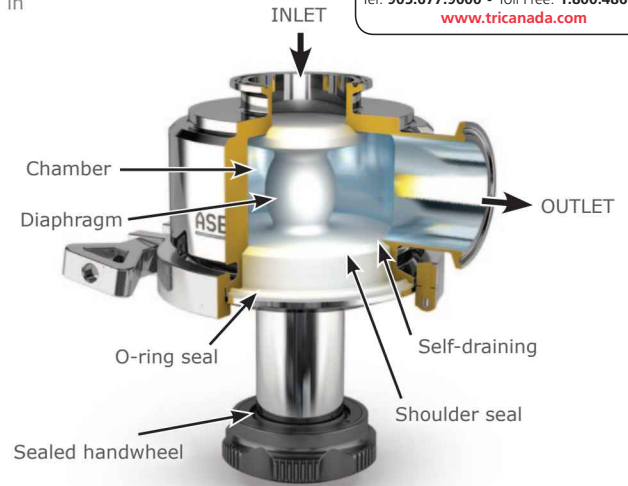
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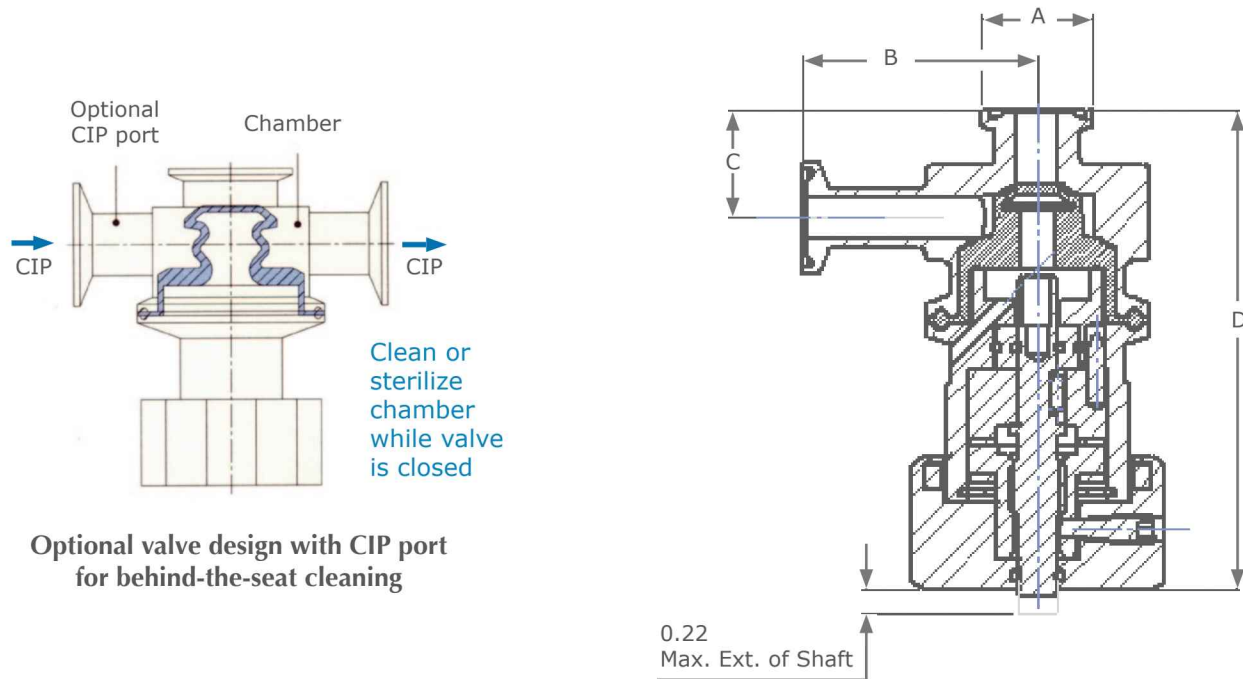
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\* Not available in all valve sizes

# Process Valve Dimensions, Flow Rates, and Weights Specifications



## PCXX-100-X Process Valve Dimensions

Size*	A	B	C	D - with Manual Actuator	D - with Pneumatic Actuator
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	0.98 (24.89)	2.08 (52.83)	0.96 (24.38)	4.25 (107.95)	5.07 (128.78)
1.00	1.98 (50.29)	2.53 (64.26)	1.26 (32.00)	5.25 (133.35)	6.85 (173.99)
1.50	1.98 (50.29)	3.35 (85.09)	2.01 (51.05)	7.34 (186.44)	8.13 (206.50)
2.00	2.52 (64.01)	3.25 (82.55)	1.76 (44.70)	7.34 (186.44)	8.13 (206.50)
3.00	3.58 (90.93)	3.76 (95.50)	2.26 (57.40)	8.34 (211.84)	10.66 (270.76)
4.00	4.68 (118.87)	4.62 (117.35)	3.55 (90.17)	11.17 (283.72)	15.04 (382.02)

\* - Note that Inlet and Outlet are the same size; for reducing sizes call ASEPCO.

## Process Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.50	2.7 (10.2)
1.00	15.8 (59.8)
1.50	48 (180)
2.00	72 (272)
3.00	170 (643)
4.00	302 (1143)

## Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (kg)	lb (kg)	lb (kg)
0.50	1.45 (0.66)	3.50 (1.59)	3.20 (1.45)
1.00	2.95 (1.34)	7.15 (3.25)	8.00 (3.64)
1.50	5.90 (2.68)	12.45 (5.66)	14.25 (6.48)
2.00	6.18 (2.81)	12.73 (5.79)	14.53 (6.60)
3.00	10.95 (4.98)	17.95 (8.16)	34.70 (15.77)
4.00	18.14 (8.25)	36.64 (16.65)	73.54 (33.43)

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part#ProcessValve\_Datasheet\_160921

## The ASEPCO Weirless Radial-Diaphragm™ Divert Valve

### Designed for Critical Aseptic Processing Applications

ASEPCO radial-diaphragm valves are specifically designed for applications where leakage, dead legs, and cross-contamination are unacceptable, just like ASEPCO's original Tank-Bottom Valve. We've applied our contamination-free, radial-diaphragm technology and easy-to-use clamp assembly to an inline diverting valve configuration, creating a reliable valve that is easy to assemble and inspect. Our divert valves are designed to allow division and blending of 2 or 3 lines in a single valve body.

#### Features

- Radial-diaphragm
- Flush mount design
- Self-draining, highly cleanable
- Simple clamp assembly
- Change diaphragms in seconds
- Integral travel stops
- Flush or CIP/SIP while valve is closed
- Fewer valve assemblies
- Minimum distances between each valve seat (fewer and shorter dead legs)
- Full CIP/SIP capability

#### Specifications

##### Valves

Material	316L, AL6XN, Hastelloy, Polypropylene Machined from solid, hot-rolled, bar stock
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	0.5 inch, 1.0 inch, 1.5 inches, 2.0 inches, 2.5 inches, and 3 inches
Outlet Connections	Standard: Sanitary flange or buttweld, (others available)
Steam Valve Inlet Connection	0.5 inch Sanitary flange standard (others available)
Maximum Pressure	[Valve body pressure only] ASME vessels: 250 psi (17 bar), PED vessels: 175 psi (12 bar)
Maximum Temperature	Varies from 135°C/275°F to 260°C/500°F depending on diaphragm material
Marking	Each valve is serialized and marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

##### Actuators

Types	Autoclavable Manual or compact normally closed or normally open pneumatic Both actuators feature position and leak indicators and are self contained
Material	304 stainless steel housing, can be made in 316L
Sizes	0.5 inches through 3 inches
Operating Air Pressure	100 psi max for pneumatic actuators
Seals	Teflon bushings and O-rings
Fitting	1/8" NPT air connection (for pneumatic)
Possible Instrumentation	• Switched • With or without solenoids • With or without DeviceNet cards

##### Diaphragms

Materials	Silicone	Silicone Plus	EPDM	EPDM Plus	Viton*	PTFE*
Temperature Range	-60 to 275°F	-60 to 275°F	-30 to 275°F	-30 to 275°F	5 to 400°F	39 to 500°F
Pressure Range	100-150psi	100-150psi	100-150psi	100-150psi	100-150psi	40-60psi
Parylene Treatment	-	√	-	√	-	-
Class	All materials: USP Class VI, 21 CFR 177.2600					

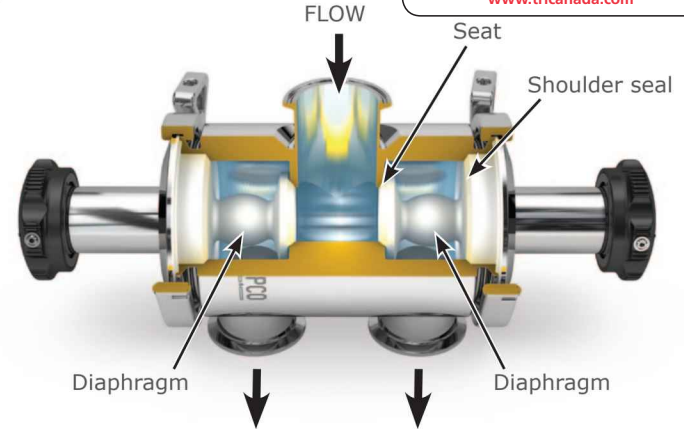
# ASEPCO

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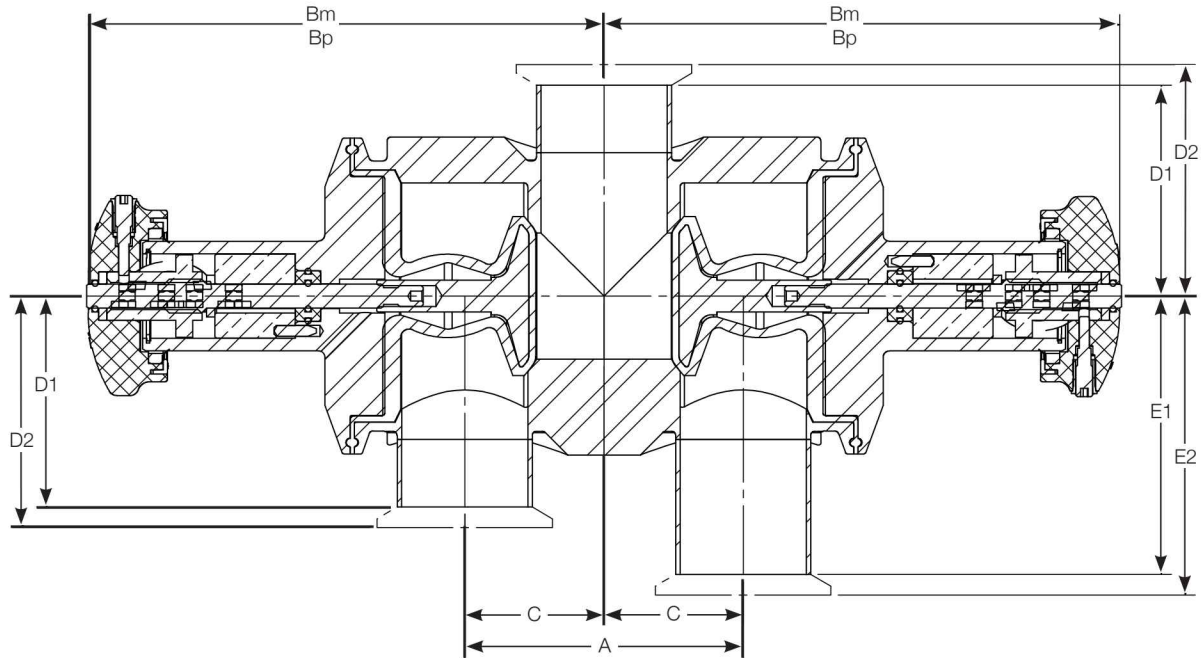
**Tri-Canada**

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www.tricanada.com



\* Not available in all valve sizes

## Divert Valve Dimensions, Flow Rates, and Weights Specifications



### TR/DVXX-701-X (weld end) DVXX-702-X (clamp end): Flush-Mounted Divert Valve

Size	A	Bm - with Manual Actuator	Bp - with Pneumatic Actuator	C	D1 Weld-End Fitting	D2 Clamp-End Fitting	E1 Weld-End Fitting	E2 Clamp-End Fitting
inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
0.50	1.55 (39)	4.13 (105)	4.90 (124)	0.77 (20)	1.96 (50)	2.08 (53)	2.96 (75)	3.08 (78)
1.00	2.13 (54)	5.05 (128)	6.66 (169)	1.06 (27)	2.40 (61)	2.53 (64)	3.40 (86)	3.53 (89)
1.50	3.13 (80)	5.60 (142)	7.41 (188)	1.56 (40)	2.67 (68)	2.79 (71)	3.67 (93)	3.79 (96)
2.00	7.40 (188)	7.64 (194)	8.50 (216)	3.70 (94)	3.13 (80)	3.25 (83)	4.13 (105)	4.25 (108)
2.50	6.41 (163)	9.07 (230)	11.42 (290)	3.25 (83)	3.59 (91)	3.71 (94)	4.59 (117)	4.71 (120)
3.00	6.00 (152)	9.07 (230)	11.42 (290)	3.00 (76)	3.59 (91)	3.71 (94)	4.59 (117)	4.71 (120)

### Divert Valve Flow Rates

Size	Cv at 1 psi (0.07 bar)
inches	GPM (LPM)
0.50	4.3 (16.3)
1.00	15.8 (59.8)
1.50	48 (182)
2.00	72 (273)
2.50	90 (341)
3.00	170 (643)

### Weights

Size	Valve Body	Total Weight with Manual Actuator	Total Weight with Pneumatic Actuator
inches	lb (Kg)	lb (Kg)	lb (Kg)
0.50	1.9 (0.9)	3.8 (1.7)	3.6 (1.6)
1.00	5.0 (2.3)	9.2 (4.2)	10.0 (4.5)
1.50	9.5 (4.3)	13.1 (5.9)	14.5 (6.6)
2.00	18.5 (8.4)	25.0 (11.3)	36.9 (16.7)
2.50	37.5 (17.0)	44.5 (20.2)	61.2 (27.7)
3.00	37 (16.8)	44 (19.9)	60.7 (27.5)

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**ASEPCO Corporation**

355 Pioneer Way  
Mountain View, CA 94041

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(650) 691-9500

Fax: (650) 691-9600

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part#DivertValve\_Datasheet\_160922

## The ASEPCO ASEPTIPORT Family

### Attach Multiple Probes Through One Connector

The ASEPTIPORT Probe Mount Family provides cleanability and flexibility for probe attachments. We know that cleanability is one of the biggest challenges that you face on a daily basis. Whether you use the Single Port version or our AseptiPort Manifold, the sealing point for your probes is on the face of the probe mount, which makes cleaning significantly easier and more consistent than other probe mounting options.

By offering multi-probe assemblies, we give you the flexibility you need with reduced installation and maintenance costs as well as a smaller footprint in your vessel.

Flexibility is ensured by attaching the probe mounts via ASEPCO's ASEPCONNECT™ or QUICKCONNECT™ Vessel Connectors. These connectors, whether used for connecting flush-mounted probes, instruments, or valves to tanks, are easier to install and cleaner than alternative tank-attachment mechanisms.

### Family Features

Clean, aseptic design

Save space by attaching multiple 12-mm probes through one connector on your tank

Save time and cost by eliminating the need for multiple holes into your vessels

So flexible you can use 12-mm probes of varying lengths

An incredibly easy sleeve mounting system that secures each probe

Screw in probes or attach with clamps

Can install blanks into any port to block the port

Can be customized to suit your needs



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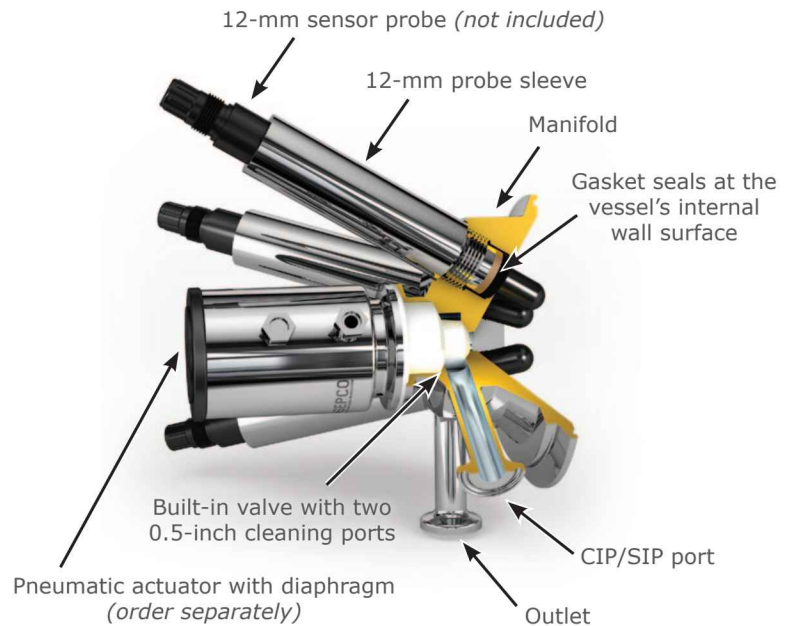
## ASEPTIPORT Family Specifications

Material	316L, AL6XN, Hastelloy C-22, C-276
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Design Pressure	-14.5 to 101.5 psig (Maximum working pressure is determined by the design pressure of the gasket being used in the assembly.)
Design Temperature	-80 to 200°C (Maximum working temperature is determined by the design pressure of the gasket being used in the assembly.)
Marking	All ASEPTIPORT probe mounts are marked for full material traceability according to ASEPCO's ISI QA Program
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or info@asepco.com

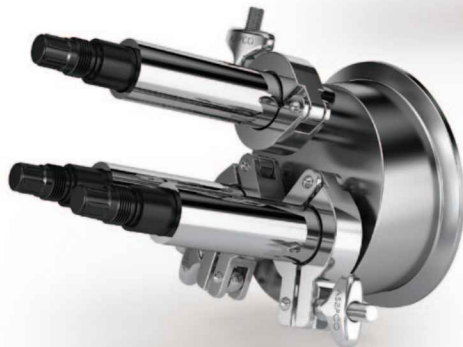
### ASEPTIPORT Manifold

- Probes thread into probe sleeve
- Manifold attaches to tank via a 4-inch ASEPCONNECT or QUICKCONNECT Vessel Connector
- Standard configuration is a circular design that comes with three probe mounts and a built-in valve with two ports for SIP/CIP
- Uses our standard 0.5-inch radial-diaphragm valve
- Choose between a manual or pneumatic actuator
- Probes can be arranged in a circular or linear design
- Manifold can be configured with up to eight probes



### ASEPTIPORT Tri-Probe Threaded Probe Mount

- Three probes attach to your tank in a very small footprint
- Probes easily screw into sleeves
- Probe mount attaches to the tank with a 2.5-inch ASEPCONNECT or QUICKCONNECT Vessel Connector

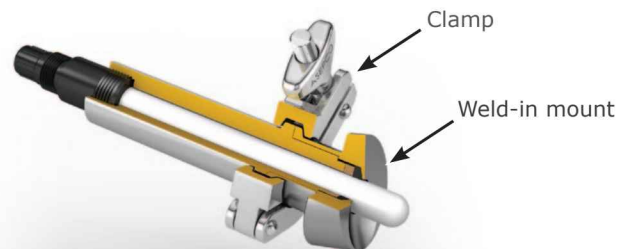


### ASEPTIPORT Tri-Probe Clamp-style Probe Mount

- Three probes attached to your tank in a small space
- Probes easily removed with clamps
- Probe mount attaches to the tank with a 4.0-inch ASEPCONNECT or QUICKCONNECT Vessel Connector

### ASEPTIPORT Single-Probe Mount

- Designed as a direct replacement for the traditional Ingold port
- By moving the sealing point of probe from inside the probe mount to the face of the probe mount, cleanability becomes significantly easier and more consistent
- A single-probe unit fits in the same space as more traditional mounts and allows you to easily attach your probe with a simple clamp
- Mount welds into the tank



# The ASEPCONNECT™ Close Couple Aseptic Connector



## Designed for Critical Aseptic Processing Applications

ASEPCO close connects are for connecting flush-mounted probes, instruments, and valves to tanks. They are easier to install and clean than the alternatives, and have ASEPCO's patented aseptic seal, which is based on the same reliable seal that you find in our valves.

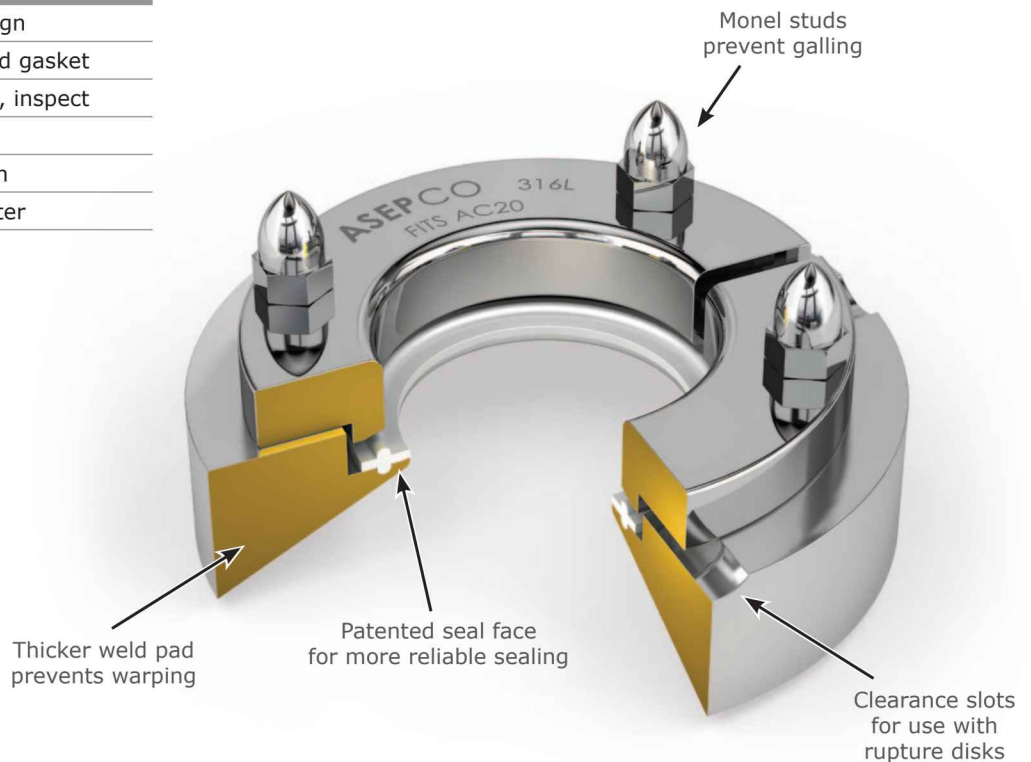
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### Features

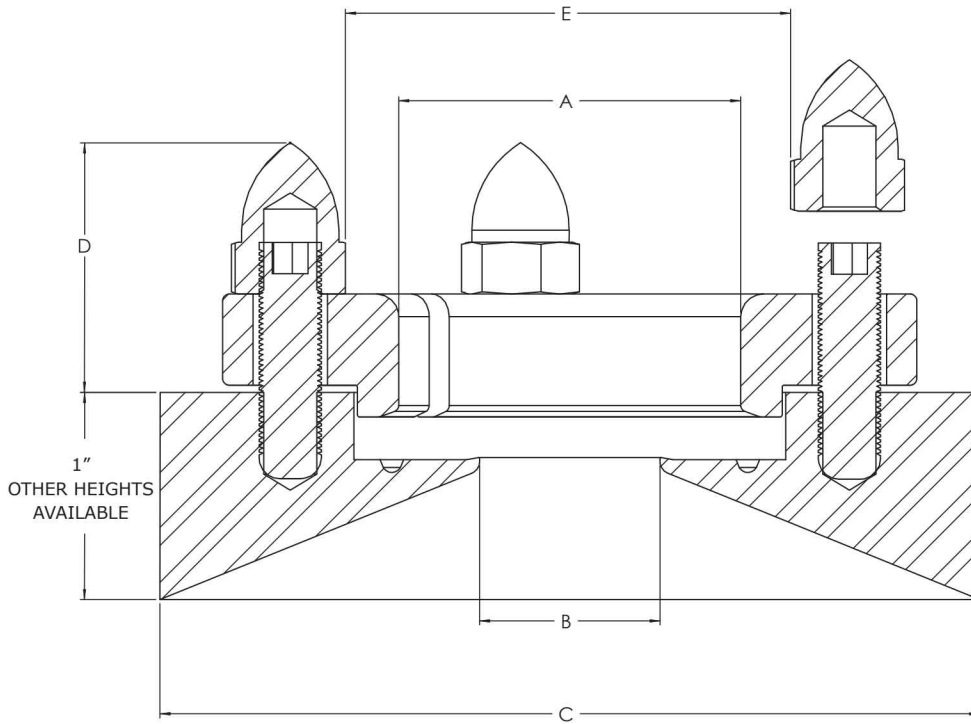
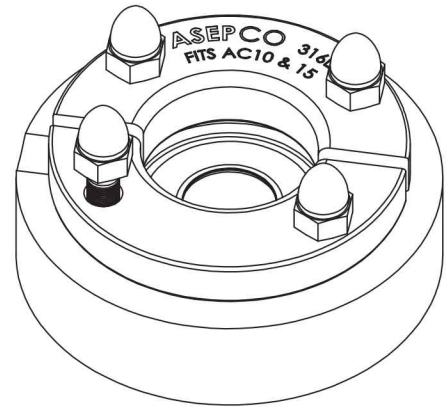
- Clean, aseptic design
- Patented compound gasket
- Easy to place, seal, inspect
- Monel studs
- Flush mount design
- Large outer diameter



### Specifications

Material	316L, AL6XN, Hastelloy
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	3/8" through 4"
Thickness	1" standard height, custom heights available upon request
Connection	Weld-in body with tri-clamp component connection
Design Pressure	-14.5 to 101.5 psig (Maximum working pressure is determined by the design pressure of the gasket being used in the assembly.)
Design Temperature	-80 to 200°C (Maximum working temperature is determined by the design pressure of the gasket being used in the assembly.)
Marking	Each connector is marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.



**Weights**

Size inches	ASEPCONNECT lb (Kg)
0.375	1.2 (.55)
0.50	1.2 (.55)
0.75	1.2 (.55)
1.00	3.0 (1.36)
1.50	3.0 (1.36)
2.00	3.7 (1.68)
2.50	5.7 (2.59)
3.00	5.7 (2.59)
4.00	7.4 (3.36)

**ASEPCONNECT Dimensions**

Model #	Size	A	B	C	D	E
	inches	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
AC04-0001	0.375	0.790 (20.1)	0.275 (7.0)	2.385 (60.6)	0.790 (20.1)	0.750 (19.1)
AC05-0001	0.50	0.790 (20.1)	0.370 (9.4)	2.385 (60.6)	0.790 (20.1)	0.750 (19.1)
AC08-0001	0.75	0.790 (20.1)	0.620 (15.7)	2.385 (60.6)	0.790 (20.1)	0.750 (19.1)
AC10-0001	1.00	1.720 (43.7)	0.870 (22.1)	3.955 (100.5)	1.205 (30.6)	1.154 (29.3)
AC15-0001	1.50	1.720 (43.7)	1.370 (34.8)	3.955 (100.5)	1.205 (30.6)	1.154 (29.3)
AC20-0001	2.00	2.170 (55.1)	1.870 (47.5)	4.500 (114.3)	1.140 (29.0)	1.603 (40.7)
AC25-0001	2.50	2.580 (65.5)	2.370 (60.2)	5.120 (130.0)	1.171 (29.7)	2.370 (60.2)
AC30-0001	3.00	3.070 (78.0)	2.870 (72.9)	5.800 (147.3)	1.171 (29.7)	3.750 (95.3)
AC40-0001	4.00	4.130 (104.9)	3.835 (97.4)	6.845 (173.9)	1.141 (29.0)	5.000 (127.0)

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part#Asepconnect\_Datasheet\_150422



# The QUICKCONNECT™ Close Couple Aseptic Connector



## Designed for Critical Aseptic Processing Applications

ASEPCO close connects are for connecting flush-mounted probes, instruments, and valves to tanks. They are easier to install and clean than alternative connectors, and they have ASEPCO's patented aseptic seal, which is based on the same reliable seal that you find in our valves.

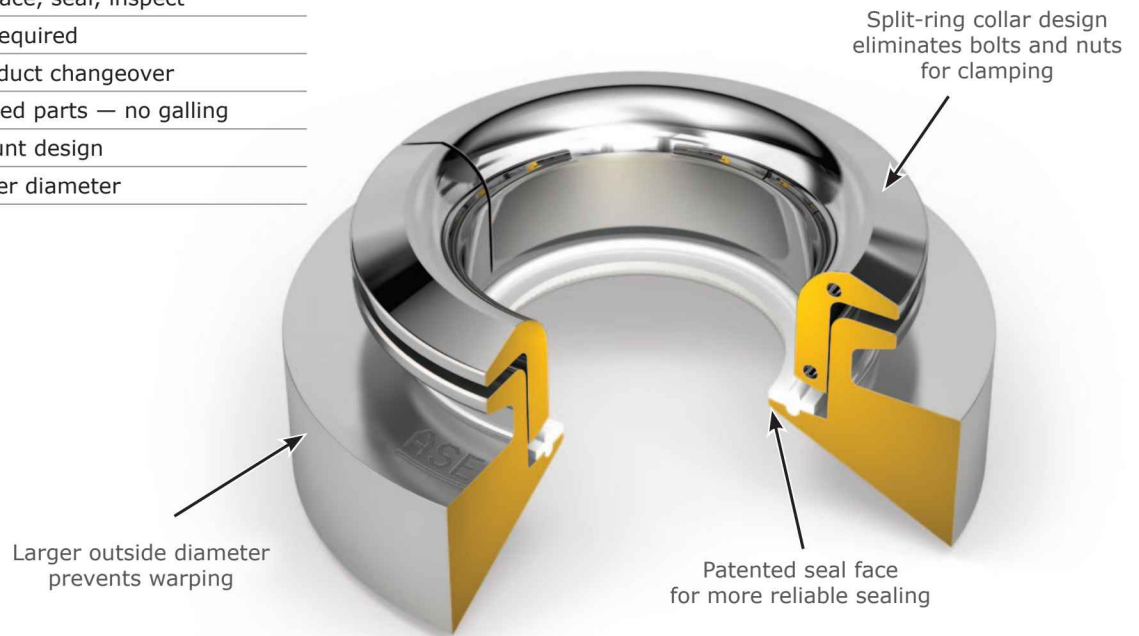
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### Features

- Clean, aseptic design
- Patented compound gasket
- Easy to place, seal, inspect
- No tools required
- Quick product changeover
- No threaded parts — no galling
- Flush mount design
- Large outer diameter

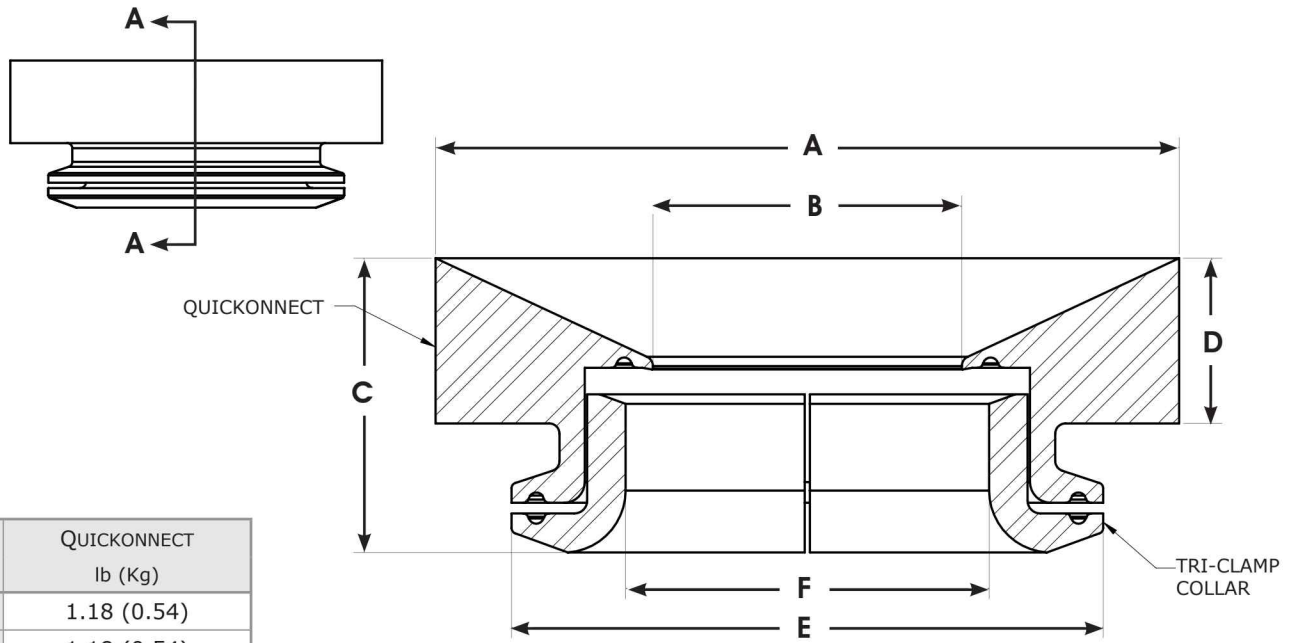


### Specifications

Material	316L, AL6XN, or Hastelloy
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	3/8" through 4"
Thickness	1" standard height, custom heights available upon request
Connection	Tri-clamp component connection
Design Pressure	-14.5 to 101.5 psig (Maximum working pressure is determined by the design pressure of the gasket being used in the assembly.)
Design Temperature	-80 to 200°C (Maximum working temperature is determined by the design pressure of the gasket being used in the assembly.)
Marking	Each connector is marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

# QUICKCONNECT Dimension & Weight Specifications



## Weights

Size inches	QUICKCONNECT lb (Kg)
0.375	1.18 (0.54)
0.50	1.18 (0.54)
0.75	1.18 (0.54)
1.00	3.10 (1.41)
1.50	2.90 (1.32)
2.00	3.45 (1.56)
2.50	4.76 (2.16)
3.00	4.75 (2.15)
4.00	8.91 (4.04)

## QUICKCONNECT Dimensions

Model #	Size inches	A	B	C	D	E	F
		in (mm)	in (mm)	in (mm)	in (mm)	in (mm)	in (mm)
QC04-0001	0.375	2.390 (60.7)	0.275 (6.99)	1.700 (43.2)	1.000 (25.4)	1.990 (50.5)	0.800 (20.3)
QC05-0001	0.500	2.390 (60.7)	0.370 (9.4)	1.700 (43.2)	1.000 (25.4)	1.990 (50.5)	0.800 (20.3)
QC08-0001	0.750	2.390 (60.7)	0.620 (15.75)	1.700 (43.2)	1.000 (25.4)	1.990 (50.5)	0.800 (20.3)
QC10-0001	1.000	3.955 (100.5)	0.870 (22.1)	1.700 (43.2)	1.000 (25.4)	3.051 (77.5)	1.720 (43.7)
QC15-0001	1.500	3.955 (100.5)	1.370 (34.8)	1.700 (43.2)	1.000 (25.4)	3.051 (77.5)	1.720 (43.7)
QC20-0001	2.000	4.500 (114.3)	1.870 (47.5)	1.781 (45.2)	1.000 (25.4)	3.580 (90.9)	2.200 (55.9)
QC25-0001	2.500	5.124 (130.1)	2.370 (60.2)	1.776 (45.1)	1.000 (25.4)	4.682 (118.9)	2.720 (69.1)
QC30-0001	3.000	5.630 (143.0)	2.870 (72.9)	1.796 (45.6)	1.000 (25.4)	4.682 (118.9)	3.220 (81.8)
QC40-0001	4.000	6.900 (175.3)	3.835 (97.4)	2.023 (51.4)	1.000 (25.4)	6.570 (116.9)	4.220 (107.2)

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part#Quickconnect\_datasheet\_150422

# The ASEPCONNECT™ Inline Close Couple Aseptic Connector



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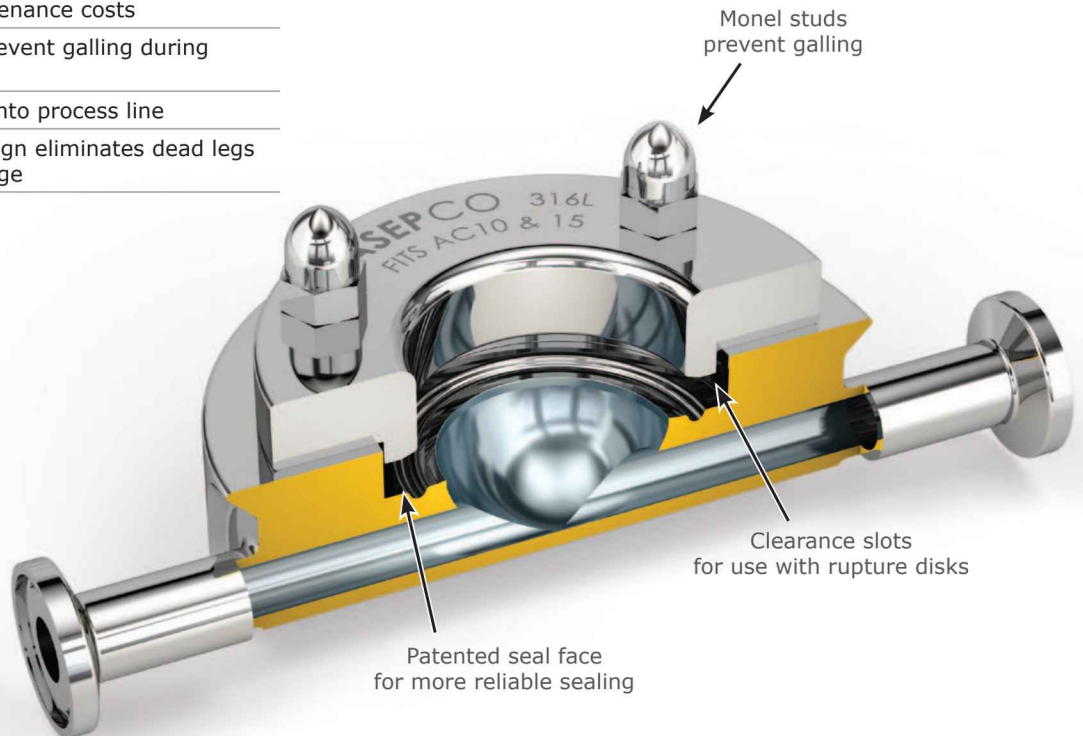
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[www.tricanada.com](http://www.tricanada.com)

## Designed for Critical Aseptic Processing Applications

ASEPCO close connects are for connecting flush-mounted probes and instruments to process lines. They are easier to install and clean than the alternatives, and have ASEPCO's patented aseptic seal, which is based on the same reliable seal that you find in our valves.

### Features

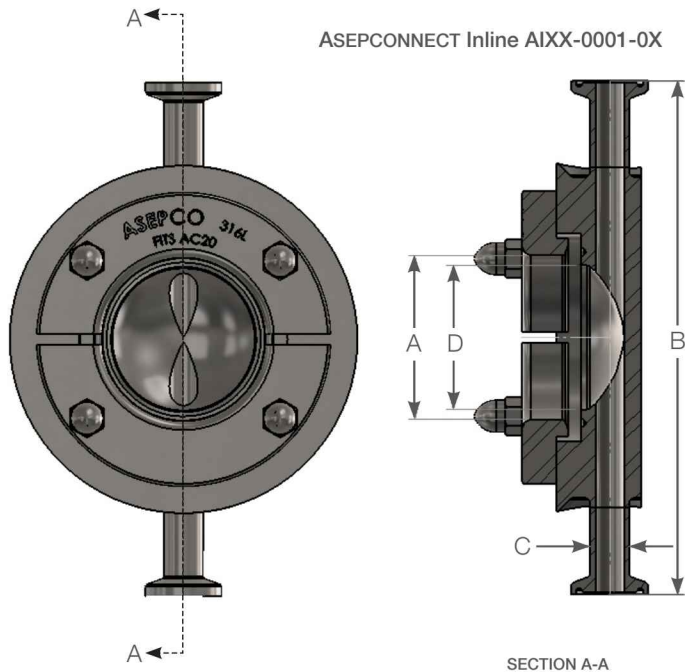
- Clean, aseptic design for use in critical aseptic processing applications
- Patented sealing face improves gasket sealing edge to eliminate leakage
- Easy to place, seal, inspect, thereby lowering maintenance costs
- Monel studs prevent galling during maintenance
- Easily clamps into process line
- Integrated design eliminates dead legs and joint leakage



## ASEPCONNECT Inline Specifications

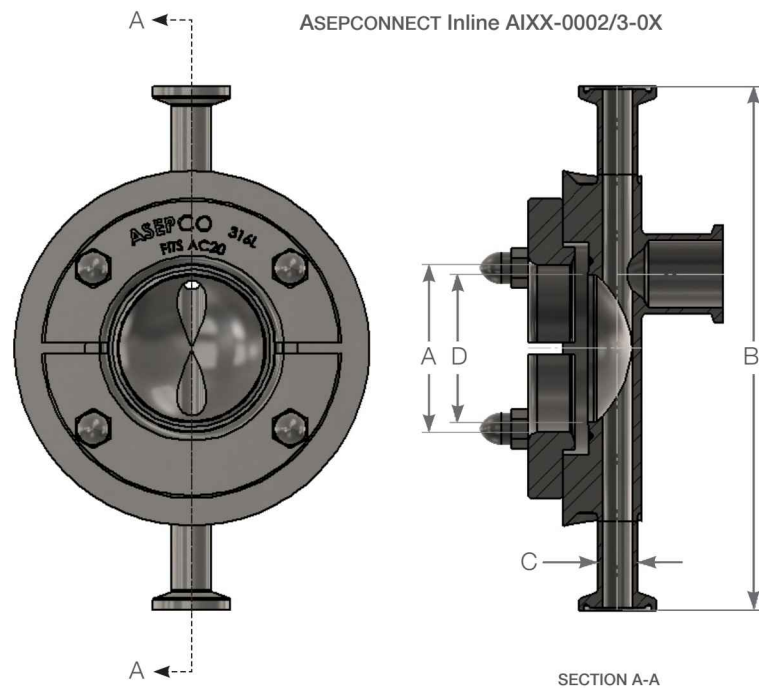
Material	316L, AL6XN, Hastelloy
Surface Finish	Max 20 micro-inch Ra (0.5 μm Ra), Electropolished Max 15 micro-inch Ra (0.375 μm Ra), Electropolished Max 10 micro-inch Ra (0.25 μm Ra), Electropolished
Sizes	1.5 inch and 2 inches standard; other sizes are available upon request
Connection	Tri-clamp component connection
Design Pressure	-14.5 to 101.5 psig (Maximum working pressure is determined by the design pressure of the gasket being used in the assembly.)
Design Temperature	-80 to 200°C (Maximum working temperature is determined by the design pressure of the gasket being used in the assembly.)
Marking	Each connector is marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.



**ASEPCONNECT Inline AIXX-0001-0X Dimensions**

Size	A	B	C	D
inches	in (mm)	in (mm)	in (mm)	in (mm)
1.50	1.64 (41.7)	6.15 (156.2)	0.50 (12.7)	1.37 (34.8)
2.00	2.13 (54.1)	6.65 (168.9)	0.50 (12.7)	1.87 (47.5)



**ASEPCONNECT Inline AIXX-0002/3-0X Dimensions**

Size	Weirless Size	A	B	C	D
inches	inches	in (mm)	in (mm)	in (mm)	in (mm)
1.50	0.50	1.64 (41.7)	6.15 (156.2)	0.50 (12.7)	1.37 (34.8)
2.00	0.50	2.13 (54.1)	6.65 (168.9)	0.50 (12.7)	1.87 (47.5)
1.50	0.75	1.64 (41.7)	6.15 (156.2)	0.75 (19.1)	1.37 (34.8)
2.00	0.75	2.13 (54.1)	6.65 (168.9)	0.75 (19.1)	1.87 (47.5)

**Weights**

Size	ASEPCONNECT Inline AIXX-0001	ASEPCONNECT Inline AIXX-0002	ASEPCONNECT Inline AIXX-0003
inches	lb (Kg)	lb (Kg)	lb (Kg)
1.50	4.0 (1.81)	3.9 (1.77)	4.6 (2.09)
2.00	5.2 (2.36)	4.8 (2.18)	5.6 (2.54)

# The QUICKONNECT™ Inline Close Couple Aseptic Connector



ADVANCED ASEPTIC PROCESSING EQUIPMENT

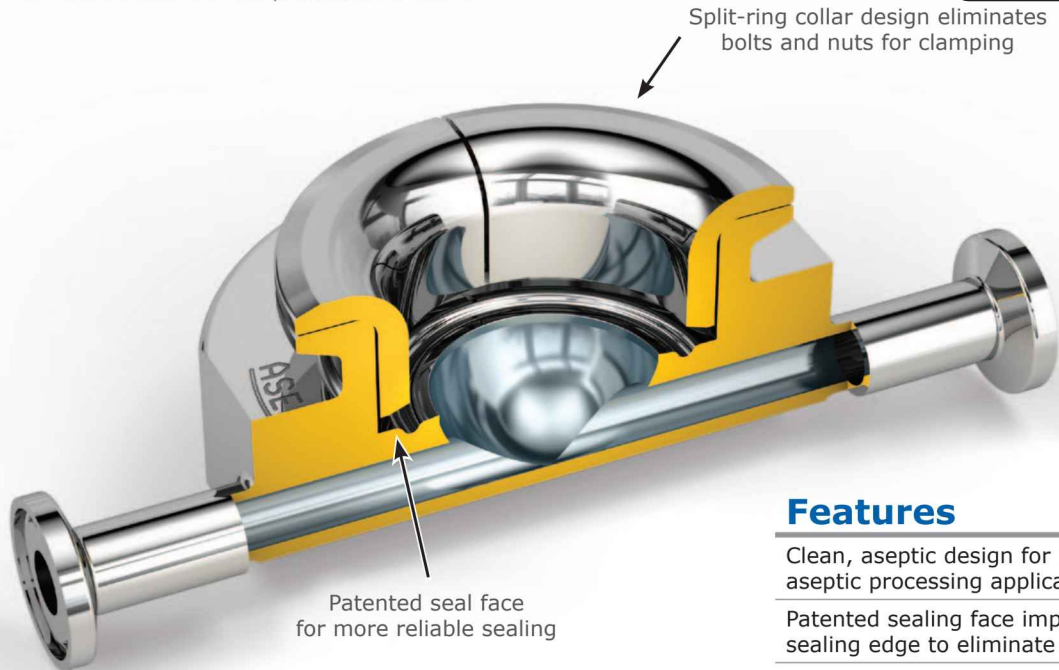
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## Designed for Critical Aseptic Processing Applications

ASEPCO close connects are for connecting flush-mounted probes and instruments to process lines. They are easier to install and clean than the alternatives, and have ASEPCO's patented aseptic seal, which is based on the same reliable seal that you find in our valves.



## Features

Clean, aseptic design for use in critical aseptic processing applications

Patented sealing face improves gasket sealing edge to eliminate leakage

Easy to place, seal, inspect, thereby lowering maintenance costs

For super-fast change out of instruments—no tools required

Can be assembled by one person

Galling is not a concern with this connector because there are no threaded parts

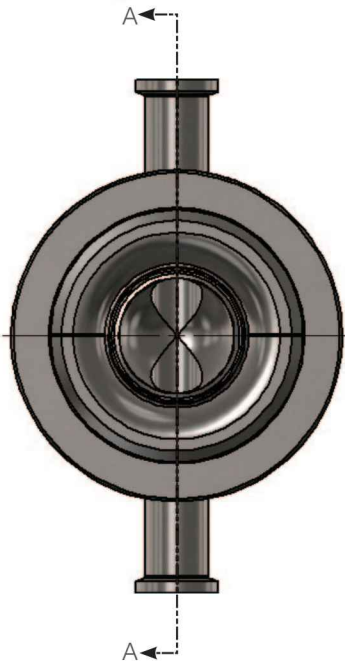
Tri-clamp connection provides quick product changeover

Integrated design eliminates dead legs and joint leakage

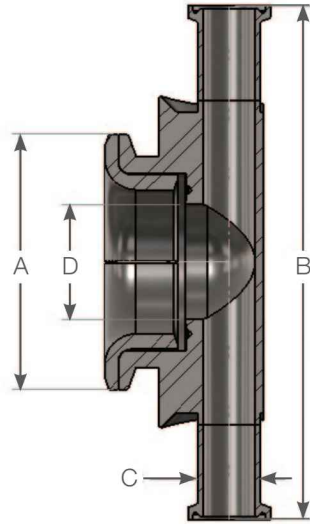
## QUICKONNECT Inline Specifications

Material	316L, AL6XN, Hastelloy
Surface Finish	Max 20 micro-inch Ra (0.5 µm Ra), Electropolished Max 15 micro-inch Ra (0.375 µm Ra), Electropolished Max 10 micro-inch Ra (0.25 µm Ra), Electropolished
Sizes	1.5 inch and 2 inches standard; other sizes are available upon request
Connection	Tri-clamp component connection
Design Pressure	-14.5 to 101.5 psig (Maximum working pressure is determined by the design pressure of the gasket being used in the assembly.)
Design Temperature	-80 to 200°C (Maximum working temperature is determined by the design pressure of the gasket being used in the assembly.)
Marking	Each connector is marked for full material traceability
ISO	All product and procedures are governed by our ISO Quality Assurance Program
Standards	BPE, CE-PED, ASME

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.



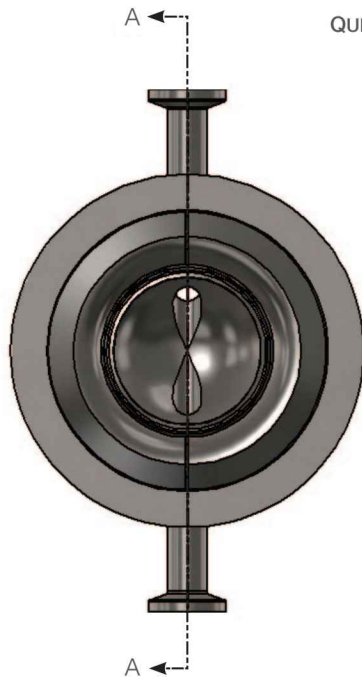
QUICKCONNECT Inline QIXX-0001-0X



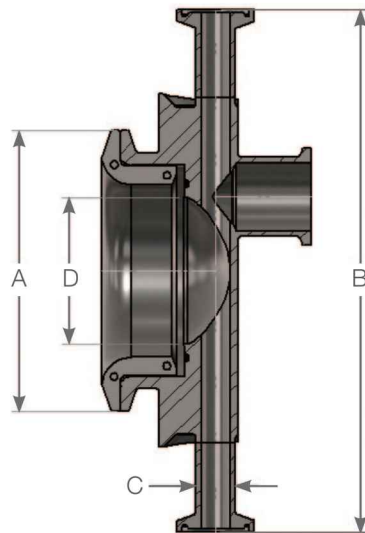
SECTION A-A

**QUICKCONNECT Inline QIXX-0001-0X Dimensions**

Size	A	B	C	D
inches	in (mm)	in (mm)	in (mm)	in (mm)
1.50	1.72 (43.7)	6.15 (156.2)	0.50 (12.7)	1.37 (34.8)
2.00	2.20 (55.9)	6.65 (168.9)	0.50 (12.7)	1.87 (47.5)



QUICKCONNECT Inline QIXX-0002/3-0X



SECTION A-A

**QUICKCONNECT Inline QIXX-0002/3-0X Dimensions**

Size	Weirless Size	A	B	C	D
inches	inches	in (mm)	in (mm)	in (mm)	in (mm)
1.50	0.50	1.72 (43.7)	6.15 (156.2)	0.50 (12.7)	1.37 (34.8)
2.00	0.50	2.20 (55.9)	6.65 (168.9)	0.50 (12.7)	1.87 (47.5)
1.50	0.75	1.72 (43.7)	6.15 (156.2)	0.75 (19.1)	1.37 (34.8)
2.00	0.75	2.20 (55.9)	6.65 (168.9)	0.75 (19.1)	1.87 (47.5)

**Weights**

Size	QUICKCONNECT Inline QIXX-0001	QUICKCONNECT Inline QIXX-0002	QUICKCONNECT Inline QIXX-0003
inches	lb (Kg)	lb (Kg)	lb (Kg)
1.50	3.7 (1.68)	3.7 (1.68)	4.4 (1.99)
2.00	4.7 (2.13)	4.8 (2.18)	5.6 (2.54)

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QuickconnectInline\_Datasheet\_150417

## ASEPCO Actuators for Radial-Diaphragm (90°) Valves

### Designed for Fast and Easy Maintenance

When we designed our actuators, we took great care in making them industry appropriate, operator friendly, and rugged enough to withstand some pretty rough treatment. If you can fasten a tri-clamp, you can easily assemble and disassemble any ASEPCO valve for inspection or maintenance, and you can do it without tools!



### Features

Requires little maintenance – typically on a yearly basis

EPDM bushings and O-rings, but very few of them

All actuators meet 3A requirements

So well made, they don't need grease



### Actuator Options

The specific options for an actuator not only depends on the type, but also depends on the size.

Please contact ASEPCO to find out the specific options for any particular actuator.

#### Manual

- ▲ Colored handles
- ▲ Remote handles
- ▲ Lock-out
- ▲ 4-inch grand handle
- ▲ Stainless steel handle
- ▲ Extension handle for remote operation

#### Pneumatic

- ▲ Switches
- ▲ Solenoids
- ▲ Regulators
- ▲ Dual-acting positioners
- ▲ Pneumatic piping
- ▲ Fail open/closed

### For Standard 90° Radial-Diaphragm Valves:

- ASEPCO Tank Bottom Valve Family
- ASEPCO Process Valve Family
- ASEPCO Sampling Valve Family
- ASEPCO Takeoff Valve Family

### Specifications

#### Materials

Actuator bodies	Solid-bar 304 stainless steel (can be 316L)
Diaphragm shafts	316L stainless steel
Actuator shafts	Nitronic 60 or Gall-Tough® stainless steel
O-rings	EPDM
Seals	EPDM
Bearings	Two sets of stainless steel thrust bearings in nylon cages

#### Instrumentation

Position indication	Position-indicating shaft provides visual confirmation of valve position
Pneumatic air connection fitting	1/8-inch NPT (autoclavable); lubrication not required

#### Environment

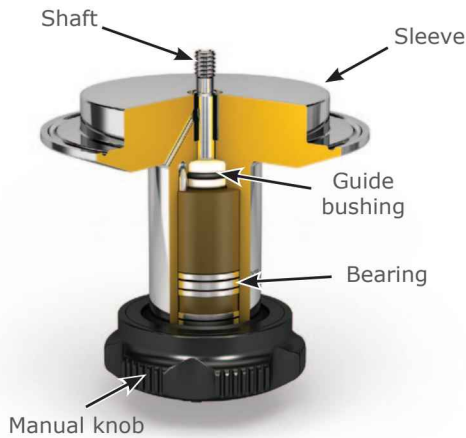
Max pressure	250 psi
Max temperature	135° C (or 275° F)

#### Quality

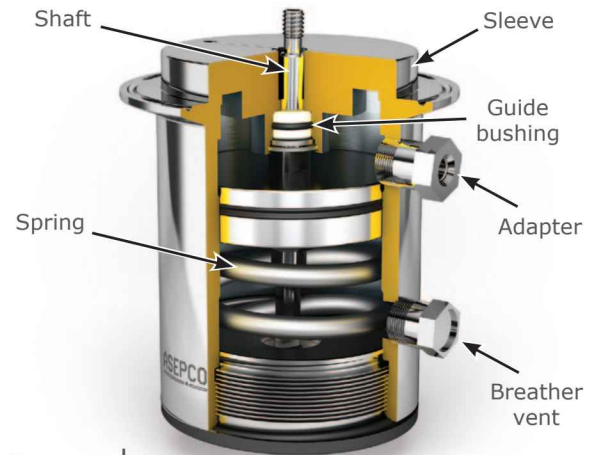
Standards	BPE, CE-PED, ASME
ISO	All product and procedures are governed by our ISO Quality Assurance Program

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

# Radial-Diaphragm (90°) Valve Actuators Dimension & Weight Specifications



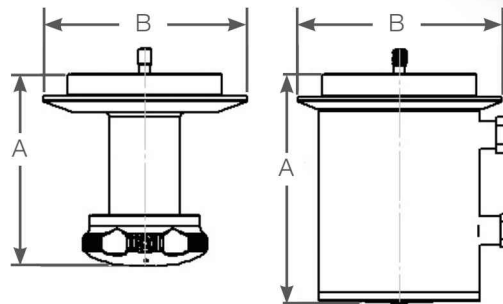
**Manual actuator**



**Pneumatic actuator**



Extension handle for remote operation of manual actuators



## Manual Actuators

Size	A inches (mm)	B inches (mm)	Max Travel inches (mm)	Weight lbs (kg)	Clearance Required for Removal inches (mm)
0.50	2.4 (61.0)	2.0 (50.8)	0.22 (5.6)	1.1 (0.50) (plastic handle)	3.4 (86.4)
1.00	2.8 (71.1)	3.0 (76.2)	0.31 (7.9)	2.2 (1.00) (plastic handle)	4.1 (104.1)
1.50	3.9 (99.1)	3.0 (76.2)	0.56 (14.2)	2.4 (1.09) (plastic handle)	5.6 (142.2)
2.00	4.4 (111.8)	4.7 (119.4)	0.56 (14.2)	4.7 (2.13) (plastic handle)	5.6 (142.2)
3.00	4.4 (111.8)	4.7 (119.4)	0.78 (19.8)	4.7 (2.13) (plastic handle)	7.6 (193.0)
4.00	5.5 (139.7)	6.5 (165.1)	1.00 (25.4)	13.7 (6.21) (steel handle)	9.7 (246.4)

## Pneumatic Actuators

Size	A inches (mm)	B inches (mm)	Max Travel inches (mm)	Weight lbs (kg)	Clearance Required for Removal inches (mm)
0.50	3.2 (81.0)	2.0 (50.8)	0.22 (5.6)	1.6 (0.73)	3.4 (86.4)
1.00	4.4 (111.0)	3.0 (76.2)	0.31 (7.9)	4.7 (2.13)	4.1 (104.1)
1.50	4.7 (119.9)	3.0 (76.2)	0.56 (14.2)	4.7 (2.13)	5.6 (142.2)
2.00	5.2 (132.1)	4.7 (119.4)	0.56 (14.2)	7.8 (3.54)	5.6 (142.2)
3.00	6.8 (172.7)	4.7 (119.4)	0.78 (19.8)	22.1 (10.02)	10.5 (266.7)
4.00	9.3 (236.7)	6.5 (165.1)	1.00 (25.4)	52.2 (23.68)	14.0 (355.6)

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part# Actuators\_datasheet\_150417



## ASEPCO Actuators for Weirless Diaphragm (180°) Valves

### Designed for Fast and Easy Maintenance

When we designed our actuators, we took great care in making them industry appropriate, operator friendly, and rugged enough to withstand some pretty rough treatment. If you can fasten a tri-clamp, you can easily assemble and disassemble any ASEPCO valve for inspection or maintenance, and you can do it without tools!



### Features

Requires little maintenance – typically on a yearly basis

EPDM bushings and O-rings, but very few of them

All actuators meet 3A requirements

### Actuator Options

The specific options for an actuator not only depends on the type, but also depends on the size.

Please contact ASEPCO to find out the specific options for any particular actuator.

#### Manual

- ▲ Colored handles

#### Pneumatic

- ▲ Switches
- ▲ Solenoids
- ▲ Regulators
- ▲ Dual-acting positioners
- ▲ Pneumatic piping



### For 180° Weirless Diaphragm Valves:

ASEPCO Weirless Block and Bleed Valve

ASEPCO Weirless Diaphragm Valve

ASEPCO Weirless Sterile Access Valve

### Specifications

#### Materials

Actuator bodies	Solid-bar 304 stainless steel (can be 316L)
Diaphragm shafts	316L stainless steel
Actuator shafts	Nitronic 60 or Gall-Tough® stainless steel
O-rings	EPDM
Seals	EPDM
Bearings	Two sets of stainless steel thrust bearings in nylon cages

#### Instrumentation

Position indication	Position-indicating shaft provides visual confirmation of valve position
Pneumatic air connection fitting	1/8-inch NPT (autoclavable); lubrication not required

#### Environment

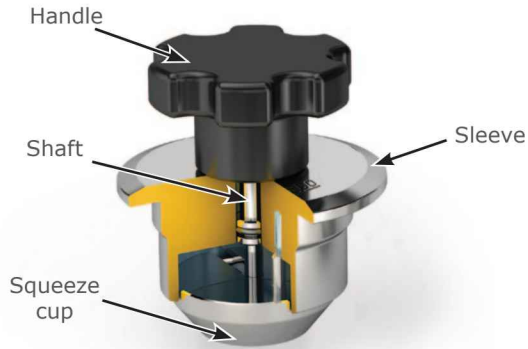
Max pressure	250 psi
Max temperature	135° C (or 275° F)

#### Quality

Standards	BPE, CE-PED, ASME
ISO	All product and procedures are governed by our ISO Quality Assurance Program

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886.

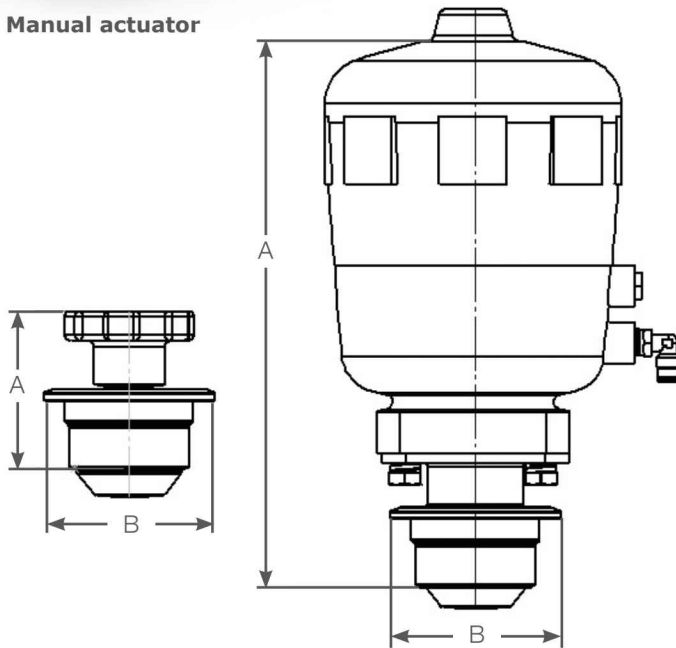
# Weirless Diaphragm (180°) Valve Actuators Dimension & Weight Specifications



**Manual actuator**



**Pneumatic actuator**



## Manual Actuators

Size	A inches (mm)	B inches (mm)	Max Travel inches (mm)	Weight lbs (kg)
0.50	2.3 (58.4)	1.2 (30.5)	0.18 (4.6)	0.50 (0.23)
0.75	2.1 (53.3)	2.0 (50.8)	0.21 (5.3)	0.75 (0.34)
1.00	3.3 (83.8)	2.5 (63.5)	0.28 (7.1)	1.60 (0.73)
1.50	3.3 (83.8)	3.6 (91.4)	0.42 (10.7)	3.05 (1.38)

## Pneumatic Actuators

Size	A inches (mm)	B inches (mm)	Max Travel inches (mm)	Weight lbs (kg)
0.50	3.5 (88.9)	1.2 (30.5)	0.18 (4.6)	2.30 (1.04)
0.75	6.1 (154.9)	2.0 (50.8)	0.21 (5.3)	2.50 (1.13)
1.00	8.1 (205.7)	2.5 (63.5)	0.28 (7.1)	4.50 (2.04)
1.50	11.5 (292.1)	3.6 (91.4)	0.42 (10.7)	11.70 (5.30)

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# ASEPCO Diaphragms

## Designed for Critical Aseptic Processing Applications

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**ASEPCO**  
 ADVANCED ASEPTIC  
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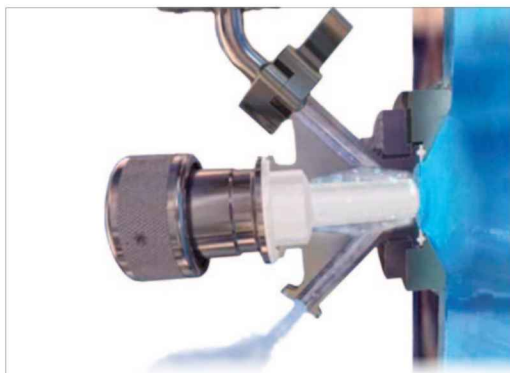


### Patented Radial-Diaphragm™ Valve and Weirless Diaphragm Valve Designs

The ASEPCO patented valve architecture (US Patent #5152500) includes a unique radial diaphragm that forms three seals with the valve: the seal at the inlet, a seal with the compound shoulder, and an O-ring seal at the bottom of the valve chamber. A behind-the-seat flow path allows complete flushing of the valve chamber. The result is a superb aseptic design that promotes self-draining and easy cleaning.

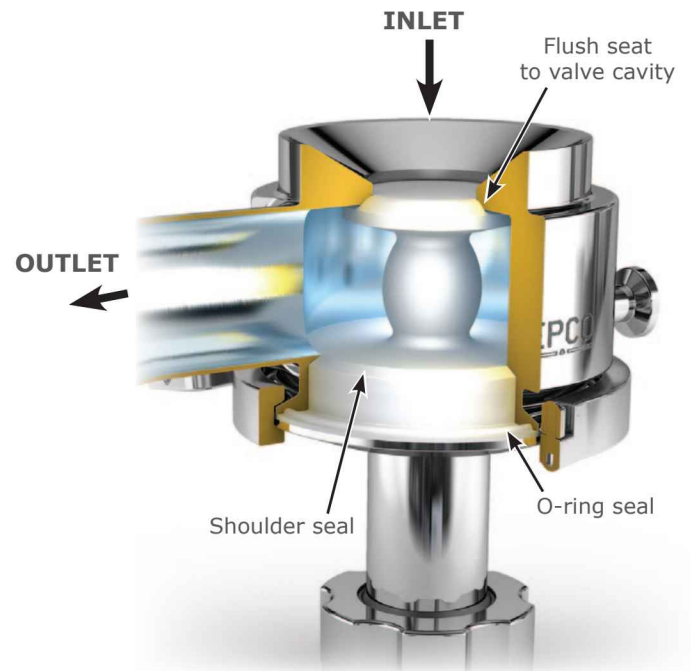
Diaphragm replacement is done with a hygienic clamp that never needs adjusting—no tools are required for maintenance and no bolts need to be periodically tightened with a torque wrench. The result is that our customers see significantly reduced maintenance costs over standard weir valves—some as much as an 80% reduction.

ASEPCO diaphragms come in a variety of materials (Silicone, EPDM, Silicone Plus, EPDM Plus, Viton, and PTFE) so that you can select the material that can best suit your specific application.



#### Behind-the-Seat Flow Path

When the valve is closed, the unique CIP/SIP “behind-the-seat flow path” can be created if you add a CIP or SIP port. This flow path makes it easy to steam or clean the valve while the valve is closed. This allows for validated aseptic and sterile connections and transfers to be performed.



Features	Benefits
All diaphragms meet USP VI standards and are FDA CFR 177.2600 compliant	Meets the standards for quality, purity, lack of toxicity, strength, and consistency Suitable for biomedical/pharma applications
Valve assembles with hygienic clamp and no tools	Diaphragm can be changed extremely quickly with little training No need for re-torquing after use
Three seals formed with valve body	Minimizes contamination and dead legs
Behind-the-seat flow path	Allows complete flushing of the valve chamber

Please contact our Customer Service Department for any non-standard valve requirement (800) 882-3886 or [info@asepco.com](mailto:info@asepco.com)

## ASEPCO Diaphragm Specifications, Material Availability, and Sizes

ASEPCO provides diaphragms created with a number of different materials. The materials vary with respect to heat-resistance, chemical-resistance, steam-resistance, and durability. The table below shows basic compatibility information. Please do not use this information as your sole method for determining whether an elastomer is right for your specific process. Before using any elastomer in a process you should verify its compatibility with an elastomer expert.

### Material Specifications

Material		Acceptable Temp Range	Pressure Range	Features
Silicone	Medical grade (platinum cured)	-60 to 275°F -51 to 135°C	100-150psi	<ul style="list-style-type: none"> <li>• Low cost</li> <li>• Physically resilient</li> <li>• Two finishes: white and clear</li> <li>• Widely used in pharmaceutical apps</li> </ul>
Silicone Plus	Silicone with Parylene surface treatment	-60 to 275°F -51 to 135°C	100-150psi	<ul style="list-style-type: none"> <li>• The same features of Silicone</li> <li>• Two times the longevity of Silicone</li> </ul>
EPDM	Ethylene propylene diene monomer (peroxide cured)	-60 to 275°F -51 to 135°C	100-150psi	<ul style="list-style-type: none"> <li>• Widely used in pharmaceutical apps</li> <li>• Relatively low cost</li> <li>• Wide temperature range; good in steam applications</li> <li>• Fairly chemically resistant; should not be used with solvents or petroleum agents</li> <li>• Black color</li> </ul>
EPDM Plus	EPDM with Parylene surface treatment	-30 to 275°F -35 to 135°C	100-150psi	<ul style="list-style-type: none"> <li>• Similar properties to EPDM; however, does not have the same stickiness</li> <li>• Two times the longevity of EPDM</li> <li>• Moderate cost</li> </ul>
Viton A	Fluoropolymer elastomer	5 to 400°F -15 to 204°C	100-150psi	<ul style="list-style-type: none"> <li>• The most commonly used version of Viton</li> <li>• Should NOT be used with most ketones or esters</li> <li>• Should not be used with extended steam exposure</li> <li>• Higher cost than EPDM and Silicone</li> </ul>
Viton A (SR)	Steam resistant version of Viton A	5 to 400°F -15 to 204°C	100-150psi	<ul style="list-style-type: none"> <li>• Performs well in conditions with extended steam</li> </ul>
Viton GF	Peroxide cured F-type Gum Polymers	5 to 400°F -15 to 204°C	100-150psi	<ul style="list-style-type: none"> <li>• More chemically resistant than Viton A</li> <li>• Offers good steam resistance</li> <li>• It should not be used with most ketones and esters</li> <li>• Higher cost than Viton A</li> </ul>
PTFE	Polytetrafluoroethylene	39 to 500°F 4 to 260°C	40-60psi	<ul style="list-style-type: none"> <li>• Extremely chemically resistant — often used with heptane and methyl chloride</li> <li>• Extremely steam resistant</li> <li>• Not really an elastomer; has cold flow issues that can result in leaking</li> <li>• Relatively higher cost compared to other materials</li> <li>• Currently only available for the following ASEPCO tank valves: Tank-Bottom, Tangential, Sterillite, Sample, Retrofit, Zero Dead Leg, Point of Use, Process, and Divert valves</li> </ul>

**Valve Size Availability:** Not all sizes of our diaphragms are available in every material. This chart indicates size availability.

Material	0.5 inch	1 inch	1.5 inches	2 inches	3 inches	4 inches
Silicone	▲	▲	▲	▲	▲	▲
Silicone Plus	▲	▲	▲	▲	▲	
EPDM	▲	▲	▲	▲	▲	▲
EPDM Plus	▲	▲	▲	▲	▲	
Viton A	▲	▲		▲	▲	
Viton A (SR)	▲	▲		▲	▲	
Viton GF	▲	▲		▲	▲	
PTFE (solid)		■	■	■	■	■

▲ Available for all valves.

■ Not available for the Inline Valve family, Insulate Valves, or I-Sample Valves; see above table for list of supported tank valves.



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